



Momentum: A Phenomenology of Musical Flow and Meaning

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Momentum: A Phenomenology of Musical Flow and Meaning

A dissertation presented

by

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to

The Department of Music

in partial fulfillment of the requirements

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Momentum: A Phenomenology of Musical Flow and Meaning

ABSTRACT

The past few decades have seen a number of attempts to take musical experience seriously. We now speak of embodiment, temporality, phenomenology, gesture, and performance. While these progressive programs have doubtless begun to move music theory and analysis away from an entrenched score-based paradigm, a deep textualism persists in even the more forward-looking approaches of the discipline.

This dissertation develops a phenomenology of music and analytical method that situates musical phenomena in the experience of performance and speaks directly of an embodied listener's engagement with sonic events.

Part 1 lays the groundwork for my project with a critical appraisal of cognitive musicology, one of the most prominent approaches to musical experience to emerge in recent years. I argue that the two cognitive semantic theories on which most of this work is based—George Lakoff and Mark Johnson's conceptual metaphor and image schema theories—are beset by various methodological and philosophical problems and ultimately reinscribe the dualist epistemology that Lakoff and Johnson purport to overcome.

Part 2 offers an alternative account of embodied experience, coordinating the phenomenology of Maurice Merleau-Ponty, the ecological psychology of J.J. Gibson and the philosophy of Eugene Gendlin. My analyses in chapter 3 delve into the nuances of my experience with several recorded performances of short passages of

piano music by Chopin and Brahms, demonstrating not only that different performances can create fundamentally different events from the same notes, but events unforeseeable from consideration of the score alone. Chapter 4 then reflects on these analyses and seeks to theorize analysis itself by placing it on a continuum with the practice of listening. This final chapter introduces a notion of “momentum” to describe the irreducible flow of experience and the emergent nexus of mutually constituting perceptions that is our ongoing determination of sense. By acknowledging the role of description and conceptualization in the very experience they articulate, I show how attending to the momentum of experience can challenge and refine the established categories of music theory.

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INTRODUCTION

Of course we all knew that life was more a process than a structure, but we tended to forget this, because a structure was so much easier to study.

- Robert Becker and Gary Selden¹

The past few decades have seen a number of attempts to take musical experience seriously. Musicology has come a long way from the arch-positivism and structuralism of the postwar era. We now speak of embodiment, temporality, phenomenology, gesture, and performance.² These progressive programs have doubtless begun to unseat what Eric Clarke called the “tyranny of the score,”³ yet the work is ongoing to establish alternatives to score-based study that can speak to the complexity of experience with musical sound. Despite the challenging of the “work” concept and the influence of post-structuralism, a deep textualism—the privileging of score over sound,

¹ Robert Becker and Gary Selden, *The Body Electric: Electromagnetism And The Foundation Of Life* (New York: William Morrow, 1985), 136.

² Lawrence Zbikowski, *Conceptualizing Music: Cognitive Structure, Theory, and Analysis*, AMS Studies in Music (Oxford; New York: Oxford University Press, 2002); Steve Larson, *Musical Forces: Motion, Metaphor, and Meaning in Music*, Musical Meaning and Interpretation (Bloomington: Indiana University Press, 2012); Candace Brower, “A Cognitive Theory of Musical Meaning,” *Journal of Music Theory* 44, no. 2 (2000): 323–79; Anthony Gritten and Elaine King, eds., *Music and Gesture* (Aldershot, England; Burlington, VT: Ashgate, 2006); Robert S. Hatten, *Interpreting Musical Gestures, Topics, and Tropes: Mozart, Beethoven, Schubert* (Bloomington: Indiana University Press, 2004); Eric F. Clarke and Nicholas Cook, *Empirical Musicology: Aims, Methods, Prospects* (Oxford; New York: Oxford University Press, 2004); John S. Rink, *The Practice of Performance: Studies in Musical Interpretation* (Cambridge, UK; New York: Cambridge University Press, 2005); Thomas Clifton, *Music as Heard: A Study in Applied Phenomenology* (New Haven: Yale University Press, 1983); David Lewin, “Music Theory, Phenomenology, and Modes of Perception,” in *Studies in Music with Text* (New York: Oxford University Press, 2006), 53–108.

³ Eric F. Clarke, “Empirical Methods in the Study of Performance,” in *Empirical Musicology Aims, Methods, Prospects*, ed. Eric F. Clarke and Nicholas Cook (Oxford; New York: Oxford University Press, 2004), 99.

the visual over the aural—persists in even the more forward-looking paradigms of the discipline.

David Lewin's influential phenomenology is illuminating in this regard.⁴ For all its virtues—its incorporation of perceptual pluralism and resisting of hypostatized objects—the experience Lewin seeks to capture is imagined. Performance is hypothetical. As a result, the realm of possible perceptions is in an important sense constrained by the score. I would argue that his phenomenology is more a reading back of temporality into the score than an account of music as experienced. Lewin's "perceiver" is less an embodied subject than a harmonic processor, computing the data as given by the score. And the "perceptions" of this perceiver are necessarily one step removed from actual perception: they are a positing of what a theoretically-driven processing of notes might be like, rather than the stuff of experience per se. What ends up being "phenomenologized," perhaps, is not perception but a score-based harmonic analysis.

The desire to move away from score is a central aim of many performance studies of empirical musicology. The microtiming analyses in particular attempt to confront the realities of musical sound directly, extracting timing and often volume data from recorded performances.⁵ Their findings have been illuminating in many ways. Yet performance analysis has often succumbed to a deeper, subtler form of textualism by

⁴ Lewin, "Music Theory, Phenomenology, and Modes of Perception."

⁵ See, for example, John S. Rink, Neta Spiro, and Nicolas Gold, "The Form of Performance: Analyzing Pattern Distribution in Select Recordings of Chopin's Mazurka Op. 24 No. 2," *Musicae Scientiae* 14, no. 2 (2010): 23–55; John S. Rink, "The Line of Argument in Chopin's E Minor Prelude," *Early Music* 29, no. 3 (2001): 434–46; Alan Dodson, "Expressive Timing in Expanded Phrases: An Empirical Study of Recordings of Rthree Chopin Preludes," *Music Performance Research* 4 (2011): 2–29; Daniel Barolsky, "Embracing Imperfection In Benno Moiseiwitsch's Prelude to Chopin," *Music Performance Research* 2 (2008): 48–60; Clarke, "Empirical Methods in the Study of Performance"; Olivier Senn, Lorenz Kilchenmann, and Marc-Antoine Camp, "Expressive Timing: Martha Argerich Plays Chopin's Prelude Op.28/4 in E Minor," *International Symposium on Performance Science*, 2009, 107–12.

regarding recordings as yet another text to be deciphered. That pitfall has been recognized by two of its leading practitioners.⁶ What is more, the ciphers used to decode the data tend to be the established concepts and categories of music theory from the score-based paradigm. Even if comparison plays a large role, there is an enduring habit of judging a performance's "deviation" from benchmarks set by the score. Performance is thus, in many cases, still held up to the ultimate standard of the "the piece" and the structures music theory asserts to lie therein. Such lingering "scorism" shows just how deep the textualist bias runs.

A more radical rethinking is necessary for music theory and analysis to embrace the paradigm of performance. Taking experience seriously means accepting performance as constitutive of, rather than incidental to, the phenomenon of music, in turn allowing it to do more than, or simply nothing like, "realize" the structures that are posited to inhere in the notation. By recognizing the categorical difference between sound and score we might liberate the former from the latter, enabling it to speak for itself rather than through an inadequate textual interpreter. But how do we speak of such experience?

In a word, directly. This dissertation proposes a mode of music analysis and phenomenology of music that shows how this is possible.

I begin that larger project with a critique of one of the most popular and promising approaches to musical experience to emerge in the last two decades: cognitive musicology. Drawing on cognitive psychology, with special attention to cognitive semantics, cognitive musicologists have sought to ground various aspects of musical

⁶ Clarke, "Empirical Methods in the Study of Performance," 99; Nicholas Cook, "Between Process and Product: Music And/as Performance," *Music Theory Online* 7, no. 2 (2001): 22.

meaning in the embodied patterns of understanding that ground meaning generally.⁷ The work of cognitive linguists George Lakoff and Mark Johnson figures prominently, in particular their theories of “conceptual metaphor” and “image schemas.”⁸ The former describes our pervasive structuring and understanding of more abstract domains of experience (e.g. emotions) in terms of more concrete domains (e.g. spatial orientation), giving rise to systematic conceptual metaphors (e.g. HAPPY IS UP) and countless correlative expressions (e.g. “I’m feeling *up*.”). Because conceptual metaphors are grounded in experiential correlation (e.g. upright posture is associated with positive mood), our conceptual/linguistic system can be said to be thoroughly embodied. Image schema theory focuses further on the basic gestalt-like dynamic patterns (e.g. VERTICALITY, CONTAINMENT) that emerge in early embodiment and structure all manner of experience, from the physical to the purely conceptual. With its central focus on embodiment, Lakoff and Johnson’s project aims to challenge and overcome an entrenched dualistic tradition by explicating the fundamental role of the body in human behavior and understanding.

My focus in part I is not on the varied musicological applications of these theories, but the theories themselves. Chapter 1 presents an overview of Lakoff and Johnson’s broader philosophical program and then focuses on the original exposition of

⁷ Zbikowski, *Conceptualizing Music*; Lawrence Zbikowski, “Musicology, Cognitive Science, and Metaphor: Reflections on Michael Spitzer’s Metaphor and Musical Thought,” *Musica Humana* 1, no. 1 (2009): 81–104; Larson, *Musical Forces*; Brower, “A Cognitive Theory of Musical Meaning”; Janna K. Saslaw, “Forces, Containers, and Paths: The Role of Body-Derived Image Schemas in the Conceptualization of Music,” *Journal of Music Theory* 40, no. 2 (1996): 217–43; Janna K. Saslaw, “Far Out: Intentionality and Image Schema in the Reception of Early Works by Ornette Coleman,” *Current Musicology*, no. 69 (2000): 97–117.

⁸ George Lakoff and Mark Johnson, *Metaphors We Live By*, 2nd ed. (Chicago: University Of Chicago Press, 2003); Mark Johnson, *The Body in the Mind: The Bodily Basis of Meaning, Imagination, and Reason* (Chicago: University of Chicago Press, 1987); George Lakoff, *Women, Fire, and Dangerous Things* (Chicago: University of Chicago Press, 1987); George Lakoff and Mark Johnson, *Philosophy in the Flesh: The Embodied Mind and Its Challenge to Western Thought* (New York: Basic Books, 1999).

conceptual metaphor theory in their seminal *Metaphors We Live By*. Combining previous scholarship and original argumentation, I expose various methodological and philosophical shortcomings of their approach. Ultimately I argue that conceptual metaphors are not a fundamental basis of thought but a post-hoc artifact of linguistic analysis. Chapter 2 takes up image schema theory as promulgated by Johnson in *The Body in the Mind* with later elaborations by both scholars. Building on and adding to extant critical scholarship, I argue that Johnson's theory is beset by contradiction and his evidence marred by methodological and interpretational flaws. Like conceptual metaphor theory, image schema theory mistakes a conceptualization of experience for its process. Drawing on Merleau-Ponty's critique of "intellectualism," I contend that Johnson's notion of embodiment, though put forward as an antidote to the mind-body dichotomy, remains entrenched in a dualistic epistemology.⁹ Though image schemas putatively emerge from bodily engagement, once abstracted therefrom, they operate, not unlike classical mental representations, as mediators between subjects (inner) and the world (outer). It is this "mediational epistemology," as Charles Taylor put it, that lies at the heart of traditional dualistic thinking.¹⁰

Part of what is lost in this mentalization of embodiment is the essential situatedness and emergence of experiential meaning. I do not simply (or at all) apply fairly determinate categories or schemas to a current situation, but navigate its unique features and contours, making sense of it as I go. It is this navigation, the ongoing process of skillful coping, that is the subject of part 2. My analyses in chapter 3 delve

⁹ Maurice Merleau-Ponty, *Phenomenology of Perception*, trans. Colin Smith (London; New York: Routledge, 2002).

¹⁰ Charles Taylor, "Merleau-Ponty and the Epistemological Picture," in *The Cambridge Companion to Merleau-Ponty*, ed. Taylor Carman and Mark B. N. Hansen (Cambridge, UK; New York: Cambridge University Press, 2005), 26–49.

into the nuances of my experience with multiple performances of short passages from Chopin and Brahms, demonstrating several key features of my approach. First, that introspective description of musical experience is not only viable and communicable but a rich source of exploration. Second, that performance is not incidental to music, actualizing or not the transcendent structures of music theory, but rather essential, capable of fashioning events unforeseeable from a consideration of the score alone. Third, that reflection on musical experience, being inherently more specific and complex than music theoretical concepts, can challenge and ultimately refine our established categories and labels.

Chapter 4 situates my analytical method in the thought of Merleau-Ponty, the ecological psychologist J.J. Gibson, and the philosopher Eugene Gendlin. Common to all three thinkers is the supposition that the basic determination of experiential sense is irreducibly processual, that the temporal flow of experience is not ancillary, but essential, to its meaning. For Merleau-Ponty, embodied perception fundamentally involves the perpetual attainment of a “best grip” on a situation, the very clarification of the perceptual scene and the specific ways it solicits our engagement.¹¹ Gibson describes a similarly exploratory process when he writes of an organism’s “attunement” to the affordances of the environment.¹² For Gendlin, meaning resides precisely in the way that the “implicit intricacy” of a situation is “carried forward” to the next.¹³ Understanding experience as process in this way obviates the need for an account of

¹¹ Merleau-Ponty, *Phenomenology of Perception*, 292.

¹² James J. Gibson, *The Senses Considered as Perceptual Systems* (Boston: Houghton Mifflin, 1966), 271; James J. Gibson, *The Ecological Approach to Visual Perception* (Hillsdale (N.J.): Lawrence Erlbaum Associates, 1986), 127.

¹³ Eugene Gendlin, *Experiencing and the Creation of Meaning: A Philosophical and Psychological Approach to the Subjective* (Evanston, Ill.: Northwestern University Press, 1997); Eugene Gendlin, “The New Phenomenology of Carrying Forward,” *Continental Philosophy Review* 37 (2004): 127–51.

memory as stored representations that are somehow brought to bear on the current situation. What I have learned in the past shows up in the very way the environment now appears to me, as the finer discriminations I can now make.¹⁴

Momentum describes the irreducible flow of experiences that, as Merleau-Ponty writes, “imply and explain each other both simultaneously and successively,”¹⁵ the emergent nexus of mutually constituting perceptions that is our ongoing determination of sense. By inextricably implicating the past (as potential) and the future (as anticipation) in the trajectory of the present, *momentum* allows us to speak of the flow of experiences and the experience of that flow as a meaning unto itself. My analyses in chapter 3 are an attempt at describing the momentum of my experience with those recorded performances. It is not a reconstruction of that experience, however, but a carrying forward of it, a continuing determination of its sense in the form of a written analysis. As Merleau-Ponty and Gendlin stress, description of experience does not stand outside the experience, but becomes bound up with it. Rumination, conceptualization, and verbalization, then, are all part of an experience’s ongoing, potentially endless, momentum. By closing the hermeneutic circle in this way, acknowledging, indeed harnessing, the inevitable interplay between felt experience and conceptualization, I show how a new kind of music theory can emerge naturally from experience and, in turn, do better justice to its complexity.

¹⁴ Hubert L. Dreyfus, “Intelligence Without Representation – Merleau-Ponty’s Critique of Mental Representation: The Relevance of Phenomenology to Scientific Explanation,” *Phenomenology and the Cognitive Sciences* 1, no. 4 (2002): 367–83.

¹⁵ Merleau-Ponty, *Phenomenology of Perception*, 327.

PART 1

Embodying Musical Meaning: A Critique of Cognitive Musicology

CHAPTER 1

Mistaking Language for Thought: Conceptual Metaphor Theory

Etymology is not epistemology.

- M.S. McGlone¹

The rise of “cognitive musicology” has been among the more notable trends in recent scholarship. Drawing on the discipline(s) of cognitive science, especially the cognitive linguistics of George Lakoff, Mark Johnson, Ron Langacker, Gilles Fauconier, and Mark Turner, this emerging field seeks to address questions of music perception, cognition, and conceptualization. Though it in part aims to reveal the metaphorical basis of analytical and theoretical discourse,² its larger ambitions can hardly be overstated. For by subscribing to the fundamental premise of “conceptual metaphor” theory—that metaphor is not just a lexical but a mental construct—ostensibly linguistic insights are elevated to cognitive and epistemological facts. At stake, then, is nothing less than a theory of musical meaning. More ambitious still is Lawrence Zbikowski’s claim that “the value of this approach...lies in better

¹ Matthew S. McGlone, “What Is the Explanatory Value of a Conceptual Metaphor?,” *Language & Communication* 27, no. 2 (2007): 12.

² See, for example, Janna Saslaw, “Forces, Containers, and Paths: The Role of Body-Derived Image Schemas in the Conceptualization of Music,” *Journal of Music Theory* 40, no. 2 (1996): 217–243; Lawrence Zbikowski, “Conceptual Models and Cross-Domain Mapping: New Perspectives on Theories of Music and Hierarchy,” *Journal of Music Theory* 41, no. 2 (1997): 193–225.

understanding what it means to be human and what it means to have culture.”³ The implied reconciliation between nature and nurture is no accident. Cognitive musicology, as a descendant of the “second cognitive revolution” of the 1980s, promises to mediate between scientific and humanistic paradigms, to align the traditionally inharmonious searches for hard truth and hermeneutic insight.⁴

The nexus of this synthesis is the embodied mind, or a particular conception of it based largely on the “image schemas” developed concurrently by Lakoff and Johnson (hereafter L&J) in their 1987 publications.⁵ Defined by the latter as “structures for organizing our experience and comprehension,” these “recurrent pattern[s], shape[s], and regularit[ies]...emerge as meaningful structures for us chiefly at the level of our bodily movements through space, our manipulations of objects, and our perceptual interactions.”⁶ These basic, cross-modal “experiential gestalts”⁷—e.g. CONTAINER, SOURCE-PATH-GOAL, VERTICALITY—are deployed via metaphorical projection, or “cross-domain mapping,” in the experiencing, understanding, and conceptualization of other, typically more abstract, domains of experience.⁸ For example, the CONTAINER schema, which purportedly arises from early experiences interacting with containers of

³ Lawrence Zbikowski, “Musicology, Cognitive Science, and Metaphor: Reflections on Michael Spitzer’s Metaphor and Musical Thought,” *Musica Humana* 1, no. 1 (2009): 84.

⁴ For an overview of the various interests of the field, see Lawrence Zbikowski, “Metaphor and Music,” in *The Cambridge Handbook of Metaphor and Thought* (2008): 510–512.

⁵ Mark Johnson, *The Body in the Mind: The Bodily Basis of Meaning, Imagination, and Reason* (Chicago: University Of Chicago Press, 1987); George Lakoff, *Women, Fire, and Dangerous Things* (Chicago: University of Chicago Press, 1987).

⁶ Johnson, *The Body in the Mind*, 29.

⁷ Ibid., 41.

⁸ For consistency I have adopted Lakoff and Johnson’s use of caps to denote conceptual domains or image schemas.

all kinds (rooms, cups, our bodies, etc.), is used as a “source domain” to structure our understanding of arguments (among many other “target domains”) in the conceptual metaphor ARGUMENTS ARE CONTAINERS, giving rise to expressions like “I’m tired of your *empty* arguments” and “that argument *has holes in it*.”⁹ Or, more pertinently, VERTICALITY, emerging naturally from the orientation of our bodies in our environment, then structures our experience and conceptualization of, *inter alia*, PITCH, yielding the (verbalizable) perception and comprehension of, for instance, an *ascending* melody. Though the theories arose from and are evidenced largely by linguistic analysis, image schemas are asserted to be “psychologically real”¹⁰ and conceptual metaphor “one of the chief cognitive structures by which we are able to have coherent, ordered experiences that we can reason about and make sense of.”¹¹

Music scholars of varied stripes have gravitated to these and related findings—known broadly as “cognitive semantics”—and have steadily incorporated them into their research. Notably, on the heels of Lakoff and Johnson’s seminal *Metaphors We Live By*, Steven Feld applied this new brand of linguistic-cum-cognitive analysis to his study of the language used by the Kaluli of Papa New Guinea to refer to their music.¹² Interest and work in cognitive semantic applications to musicology burgeoned in the mid-90s: an influential article by Janna Saslaw uncovering the image-

⁹ George Lakoff and Mark Johnson, *Metaphors We Live by* (Chicago: University of Chicago Press, 1980), 92. Throughout, emphasis is original unless otherwise noted.

¹⁰ Raymond W. Gibbs and Herbert L. Colston, “The Cognitive Psychological Reality of Image Schemas and Their Transformations,” *Cognitive Linguistics* 6, no. 4 (1995): 347–378.

¹¹ Johnson, *The Body in the Mind*, xv.

¹² Steven Feld, “Flow like a Waterfall’: The Metaphors of Kaluli Musical Theory,” *Yearbook for Traditional Music* 13 (1981): 22.

schematic/conceptual metaphor underpinnings of Riemann's theory of modulation, a special session at the Society for Music Theory's annual conference, and a dedicated issue of *Theory and Practice* signaled the emergence of cognitive musicology proper. In the past decade and a half, scholars have extended the purview of these twin paradigms to semiotics and gesture (Hatten, Lidov), musical force and space (Larson, Cox), music-text relationships (Zbikowski), music analysis (Brower, Bauer, Bhogal), history of theory (Saslaw, Zbikowski), musical ontology (Butterfield, Zbikowski), ethnomusicology (Naroditskaya), musical meaning (Chuck, Borgo, Cox), and the psychology of music perception (Eitan et al.).¹³

¹³ Robert S. Hatten, "A Theory of Musical Gesture and Its Application to Beethoven and Schubert," in *Music and Gesture*, eds. Anthony Gritten and Elaine King (Ashgate Publishing, Ltd., 2006), 1-23; Robert S. Hatten, *Interpreting Musical Gestures, Topics, and Tropes: Mozart, Beethoven, Schubert* (Bloomington: Indiana University Press, 2004); David Lidov, "Emotive Gesture in Music and Its Contraries," in *Music And Gesture*, ed. Anthony Gritten and Elaine King (Ashgate Publishing, Ltd., 2006), 24-44; Mark Johnson and Steve Larson, "'Something in the Way She Moves': Metaphors of Musical Motion," *Metaphor and Symbol* 18, no. 2 (2003): 63-84; Steve Larson, *Musical Forces: Motion, Metaphor, and Meaning in Music* (Bloomington: Indiana University Press, 2012); Candace Brower, "Pathway, Blockage, and Containment in Density 21.5," *Theory and Practice* 22/23 (1997-8): 35-54; Janna Saslaw, "Far out: Intentionality and Image Schema in the Reception of Early Works by Ornette Coleman," *Current Musicology*, no. 69 (2000): 97-117; Janna Saslaw, "Life Forces: Conceptual Structures in Schenker's Free Composition and Schoenberg's The Musical Idea," *Theory and Practice* 22-23 (1997): 17-33; Saslaw, "Forces, Containers, and Paths"; Zbikowski, "Musicology, Cognitive Science, and Metaphor"; Zbikowski, "Metaphor and Music"; Lawrence Michael Zbikowski, *Conceptualizing Music: Cognitive Structure, Theory, and Analysis*, AMS Studies in Music (Oxford and New York: Oxford University Press, 2002); Zbikowski, "Conceptual Models and Cross-Domain Mapping"; Matthew Butterfield, "The Musical Object Revisited," *Music Analysis* 21, no. 3 (2002): 327 - 380; Feld, "Flow like a Waterfall"; Inna Naroditskaya, "Azerbaijani Mugham and Carpet: Cross-Domain Mapping," *Ethnomusicology Forum* 14, no. 1 (2005): 25-55; Arnie Cox, "Embodying Music: Principles of the Mimetic Hypothesis," *Music Theory Online* 17, no. 2 (2011); Arnie Cox, "The Mimetic Hypothesis and Embodied Musical Meaning," *Musicae Scientiae* 5, no. 2 (2001): 195-212; Zohar Eitan and Roni Y. Granot, "How Music Moves," *Music Perception* 23, no. 3 (2006): 221-248.

Despite this popularity and widespread influence, the adoption of image schema and conceptual metaphor theory has been all but uncritical.¹⁴ To wit, the substantial “disagreement, and even confusion, about what image-schemas are, and what the term refers to”¹⁵ even among its leading proponents, as well as trenchant challenges by experts in related fields, have not been represented or accounted for. In what follows I offer a critique of the two focal theories of cognitive musicology—conceptual metaphor theory in chapter 1, and image schema theory in chapter 2.¹⁶ After reprising, extending, and at times refining incisive criticisms leveled by other cognitive linguists, cognitive scientists, and philosophers, I offer a phenomenological appraisal. Though my proximate objective is critique, my deeper concerns as a theorist are largely sympathetic with those of cognitive musicology, chief among which is to stress the fundamentally embodied nature of musical meaning. My claim is that image schema

¹⁴ To my knowledge, the only traces of critical engagement are in David Lidov, “Emotive Gesture in Music and Its Contraries,” in *Music And Gesture*, ed. Anthony Gritten and Elaine King (Ashgate Publishing, Ltd., 2006), 38–39., where he suggests two minor alterations to Johnson’s theory, Deanna Kemler, “Music and Embodied Imaging: Metaphor and Metonymy in Western Art Music” (PhD diss., University of Pennsylvania, 2001), where she questions the appropriateness of *metaphor* (i.e. “transfer”) as the right metaphor for the phenomenon, suggesting *metonymy* instead, and in Saslaw, “Forces, Containers, and Paths,” 237–38, where she defends Lakoff against an anthropological critique by Quinn (see fn. 52 below).

¹⁵ Joseph E. Grady, “Image Schemas and Perception: Refining a Definition,” in *From Perception to Meaning: Image Schemas in Cognitive Linguistics*, ed. Beate Hampe and Joseph E. Grady (Berlin ; New York: Mouton de Gruyter, 2005), 36. Grady is a proponent of image schema theory. Consider also the assertion of one of the field’s leading figures, Raymond Gibbs: “I recently attended a conference on empirical methods in cognitive linguistics...and there was little consensus as to what these things were and how they functioned in linguistic structure and behavior.” Raymond W. Gibbs, “The Psychological Status of Image Schemas,” in *From Perception to Meaning: Image Schemas in Cognitive Linguistics*, ed. Beate Hampe and Joseph E. Grady, 29 (Berlin ; New York: Mouton de Gruyter, 2005), 114.

¹⁶ I emphasize that this is not a comprehensive account of the many and varied endeavors subsumed by cognitive musicology, only a focused critique of two theories which form the foundation of much work so labeled.

and conceptual metaphor theory fail to provide a theoretically or phenomenologically sound ground on which to build an embodied theory of meaning.

*

Though the centerpiece of Lakoff and Johnson's (hereafter L&J) joint work began as conceptual metaphor, the implications of their findings have grown into an entire theory of mind, body, and meaning. Since their seminal *Metaphors We Live By* (1980, hereafter *MWLB*), the linguist and philosopher have framed their thought as a radical break from and critique of the long-dominant "objectivist" tradition in Western philosophy. Tenets of that paradigm include:

- "The world is made up of objects that have properties independent of observers."¹⁷
- "Meaning is an abstract relation between symbolic representations (either words or mental representations) and objective (i.e. mind-independent) reality. These symbols get their meaning solely by virtue of their capacity to correspond to things, properties, and relations existing objectively in the world."¹⁸
- "Thought is *abstract* and *disembodied*, since it is independent of any limitations of the human body, the human perceptual system, and the human nervous system."¹⁹
- "It is...incidental to the nature of meaningful concepts and reason that human beings have the bodies they have and function in their environment in the way they do."²⁰
- "Concepts are 'disembodied' in the sense that they are not tied to the particular mind that experiences them..."²¹

¹⁷ Lakoff and Johnson, *Metaphors We Live by*, 186.

¹⁸ Johnson, *The Body in the Mind*, xxii.

¹⁹ Lakoff, *Women, Fire, and Dangerous Things*, xiii.

²⁰ Ibid.

- “The most basic or fundamental level of description of reality is that of *literal* terms and propositions.... It follows that metaphorical statements cannot constitute a basic or fundamental level.”²²

Contra this orthodoxy that has ruled Western culture and philosophy “from the Presocratics to the present day,”²³ L&J champion an approach alternately called “embodied realism” and “experientialism,” principles of which include:

- “Reason is embodied in that our fundamental forms of inference arise from sensorimotor and other body-based forms of inference.
- Reason is imaginative in that bodily inference forms are mapped onto abstract modes of inference by metaphor.
- Mental structures are intrinsically meaningful by virtue of their connection to our bodies and our embodied experience.
- Conceptual structure arises from our sensorimotor experience and the neural structures that give rise to it.”²⁴

Before considering the details of these and related philosophical commitments, several observations on the general program and posture of L&J are worth noting. Given the consciously controversial, at times even polemical, nature of their enterprise,²⁵ along with its broad impact, it is curious that few philosophers have

²¹ Johnson, *The Body in the Mind*, xxii.

²² Ibid., 66.

²³ Lakoff and Johnson, *Metaphors We Live by*, 195.

²⁴ George Lakoff and Mark Johnson, *Philosophy in the Flesh: The Embodied Mind and Its Challenge to Western Thought* (New York: Basic Books, 1999), 66.

²⁵ For example, the subtitle of their 1999 *Philosophy in the Flesh* reads “The Embodied Mind and its Challenge to Western Thought”, and a subchapter of *MWLB* is titled “The Irrelevance of Objectivist Philosophy to Human Concerns.” Lakoff and Johnson, *Philosophy in the Flesh*; Lakoff and Johnson, *Metaphors We Live by*, 217.

seriously taken up their challenge. Though L&J would probably attribute this absence to the very subversiveness of their claims, predictably ignored or reflexively dismissed by the academic establishment,²⁶ it is possible, and I will argue likely, that it is rather the result of various fundamental inadequacies of their theory. One of these concerns the characterization of the putative tradition that is their foil. As Michiel Leezenberg summarizes in *Contexts of Metaphor*:

Much of its argument against “objectivist semantics”...is phrased in such sweeping terms as to be hardly worth taking seriously. Lakoff and Johnson often resort to straw man argumentation, and rarely explicitly ascribe specific doctrines to specific authors; worse, where they do, they seriously distort the views they criticize by numerous errors of a rather elementary nature. The “objectivist tradition” they fulminate against is not “fundamentally misguided” or “humanly irrelevant” but simply nonexistent.²⁷

Of greater concern is a lack of systematic and terminological clarity in their theory:

²⁶ “It is not surprising that someone raised with the traditional view would continue to deny or ignore this evidence, since to accept it would require large-scale revisions of the way she understands not only metaphor but concepts, meaning, language, knowledge, and truth as well.” Lakoff and Johnson, *Metaphors We Live By*, 245-6.

²⁷ Michiel Leezenberg, *Contexts of Metaphor* (Amsterdam ; New York: Elsevier, 2001), 137. See also Verena Haser, *Metaphor, Metonymy, and Experientialist Philosophy: Challenging Cognitive Semantics* (Berlin ; New York: Mouton de Gruyter, 2005), ch.4; Ray Jackendoff and David Aaron, “Review Article: More Than Cool Reason: A Field Guide to Poetic Metaphor, by George Lakoff and Mark Turner,” *Language* 67, no. 2 (1991): 321–322; Leezenberg, *Contexts of Metaphor*, 139–140; Haser, *Metaphor, Metonymy, and Experientialist Philosophy*, ch.5. Alongside their misrepresentation of foregoing scholarship is a neglect of both precursors to their approach and other versions of their basic critique. See Michael K. Smith, “Metaphor and Mind,” *American Speech* 57, no. 2 (1982): 130–32.

On the whole... cognitive semantics is hardly satisfactory as a theory. To begin with, central notions like “meaning,” “culture,” “rationality,” and “imagination” are largely left undefined, or are defined rather carelessly.²⁸

Indeed, an ambiguous notion of “structure” will be seen to subtend a central difficulty in L&J’s account of metaphorical mapping. Issues considered essential to any semantic theory—e.g. how listeners arrive at particular interpretations of metaphors from among numerous possibilities—are handled unsatisfactorily or not at all. Further, the psychological necessity of image schemas and conceptual metaphors is never sufficiently motivated. Finally, I will argue that as a result of the above problems, the at best vague criteria for both positing and substantiating particular conceptual metaphors, and the dependence on just-so stories of experiential grounding, the theories afford no possibility of negative evidence, that is, they are non-falsifiable.

To support these admittedly weighty accusations, let us turn to L&J’s original exposition of conceptual metaphor.

The mission of *MWLB* is to demonstrate that metaphor is an underlying mental phenomenon and only derivatively a linguistic one, that it is grounded in experience, and that it is a basic structuring principle of thought and action.²⁹ As L&J have it, “[t]he essence of metaphor is understanding and experiencing one kind of thing in terms of another.”³⁰ More specifically, it is the “partial structuring” of a “less clearly delineated”

²⁸ Leezenberg, *Contexts of Metaphor*, 138. See pp.141-143 for a critique of L&J’s “culture” and Haser, *Metaphor, Metonymy, and Experientialist Philosophy*, ch.5 for “meaning.”

²⁹ Lakoff and Johnson, *Metaphors We Live by*, 153.

³⁰ *Ibid.*, 5.

conceptual domain by a “more clearly delineated” one.³¹ To take one of their workhorse examples, L&J claim that the concept ARGUMENT is structured by the concept WAR, generating everyday expressions such as:

Your claims are *indefensible*.

He attacked every weak point in my argument.

His criticisms were *right on target*.

I’ve never *won* an argument with him.³²

L&J emphasize that the conceptual metaphor ARGUMENT IS WAR does not determine merely the way we talk about arguments, but the very way we conceive of (“we see the person we are arguing with as an opponent”), experience (“we can actually win or lose an argument”), and perform in them (“we attack his position and defend our own”).³³

Notice, however, that a statement like “I outflanked the ground invasion of his counterclaims,” though perhaps intelligible, would not be a normal expression of the underlying metaphor. L&J accordingly distinguish between the “used” and “unused” parts of the source domain as pertains its structuring of a target domain.³⁴ Though the latter is not involved in the structuring, it can be exploited to create novel expressions (for better or worse) like the one above.³⁵

³¹ Ibid., 59.

³² Ibid., 5.

³³ Ibid.

³⁴ Ibid., 52.

³⁵ Puzzlingly, L&J use the terms “literal” and “figurative” to characterize expressions emanating from the “used” and “unused” parts of the mapping, respectively. Similarly, in the

ARGUMENT IS WAR and similar conceptual metaphors—e.g. TIME IS MONEY (“*budget* your time”³⁶), LOVE IS MADNESS (“I’m *crazy* about her”³⁷)—are but one of three types of metaphorical concepts. Whereas these “structural” metaphors structure one concept in terms of another, “orientational” metaphors ‘organize a whole system of concepts with respect to one another,’ typically assigning a spatial orientation to a concept.³⁸ These assignments are not arbitrary but based on bodily and cultural experience. Thus, because “[d]rooping posture typically goes along with sadness and depression, erect posture with a positive emotional state,” we have HAPPY IS UP (“I’m feeling *up*”) and SAD IS DOWN (“My spirits *sank*”).³⁹ L&J argue for an “external systematicity” to these pervasive and often unnoticed metaphors: “GOOD IS UP gives an UP orientation to general well-being, and this orientation is coherent with special cases like HAPPY IS UP, HEALTH IS UP, ALIVE IS UP, CONTROL IS UP.”⁴⁰

The third type of metaphor, the “ontological,” comes in a few varieties: “entity and substance” metaphors confer physicality on abstract phenomena like events, emotions, activities, and ideas (e.g. “*Inflation is lowering* our standard of living”

context of ARGUMENT IS WAR, they refer to expressions such as “attack a position” and other “conventional ways of talking about arguments” as literal (Ibid., 5). They mean to stress that such expressions are just the regular, automatic, prosaic ways of talking about arguments (i.e. what we might reflexively call “literal”). Of course the whole point of their book is to show how thoroughly metaphorical, i.e. figurative, our normal language is. The choice of terminology here, the confusion of the central dichotomy which is their goal to reformulate, is infelicitous to say the least.

³⁶ Lakoff and Johnson, *Metaphors We Live by*, 8.

³⁷ Ibid., 49.

³⁸ Ibid., 14.

³⁹ Ibid., 14–15.

⁴⁰ Ibid., 18.

(INFLATION IS AN ENTITY), “You’ve got *too much hostility* in you” (HOSTILITY IS A SUBSTANCE));⁴¹ “container” metaphors construe similar phenomena and (relatively unbounded) physical areas as bounded spaces or objects (e.g. “Are you *in* the race?” (RACES ARE CONTAINERS), “We’re *out of* trouble now” (TROUBLE IS A CONTAINER), “I *have* him *in* sight” (VISUAL FIELDS ARE CONTAINERS));⁴² and “personification” metaphors (e.g. “*Life has cheated* me” (LIFE IS A PERSON), “This *fact argues* against the standard theories” (FACTS ARE PEOPLE)).⁴³

Ontological metaphors arise naturally from our “experiences with physical objects (especially our own bodies).”⁴⁴ For example, from the experience of oneself as a “container, with a bounding surface and an in-out orientation...we project our own in-out orientation onto other physical objects that are bounded by surfaces.”⁴⁵

All three types of metaphor are grounded in “systematic correlates within our experience.”⁴⁶ Orientational metaphors arise from correlations between the more “sharply delineated” conceptual structure of spatial orientations (which emerge directly from perceptual-motor functioning, e.g. UP) and the “less clearly delineated” realm of emotional experience (e.g. HAPPY).⁴⁷ Similarly, the concepts/domains OBJECT, SUBSTANCE, and CONTAINER, which emerge directly from experience with

⁴¹ Ibid., 26.

⁴² Ibid., 30–32.

⁴³ Ibid., 33.

⁴⁴ Ibid., 25.

⁴⁵ Ibid., 29.

⁴⁶ Ibid., 58.

⁴⁷ Ibid., 57–58.

instances of the same (prominently our bodies' objecthood, substantiality, and boundedness) correlate with certain less clearly delineated experiences. For example, "[t]he TIME IS A MOVING OBJECT metaphor is based on the correlation between an object moving toward us and the time it takes to get to us."⁴⁸ Analogously, in "structural" metaphors, the less concrete concept, e.g. LABOR, is structured by the more concrete concept, e.g. RESOURCE, with which it correlates experientially (i.e. "In general, the more labor you perform, the more you produce.").⁴⁹

Although "we typically conceptualize the nonphysical [i.e. less clearly delineated and usually more abstract] *in terms of* the physical [i.e. more clearly delineated and usually more concrete]," this does not imply that the latter is more experientially basic, only more conceptually basic.⁵⁰ Emphasizing the essential role of experiential grounding, L&J explain that the "IS" (or "ARE") in their verbal representations of conceptual metaphors is a shorthand for the experiential correlations that generate them.⁵¹

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For the purposes of my critique, I differentiate two chief maneuvers in L&J's program, the first positing linguistic metaphor as evidence of conceptual

⁴⁸ Ibid., 58.

⁴⁹ Ibid., 65.

⁵⁰ Ibid., 59. The identification of "clearly delineated" with "physical" and "usually more concrete" is L&J's. See Ibid., 108-9.

⁵¹ Ibid., 20.

metaphor and the second explicating the derivation and dynamics of metaphorical mappings. I will assess these in turn.

From Language to Thought

L&J's undertaking rests on two related philosophical commitments concerning the relationship of language to thought: first, that thought, specifically concepts, is logically prior to language, and second, that it is possible to infer the structure of the former from the patterns of the latter. As these are classic, well-debated issues, it is beyond the purview of this chapter to rehearse arguments on either side, or those in the middle, or to champion one view or another. It is worth noting, however, that neither position is explicitly stated or defended by L&J. This omission conceals the contentiousness of their claims and methods. To wit, there are several reasons to be skeptical of the tacit theoretical underpinning of their project.

Leezenberg highlights an epistemological complication attending the assertion of conceptual priority:

[P]reconceptual structure, which Lakoff and Johnson claim to be directly meaningful, is in fact meaningful only given a culturally determined background.... Moreover, this background cannot even be fully articulated and structured without linguistic means.... In other words, conceptual structure is not wholly prior to linguistic expression or linguistically conveyed meaning even at the allegedly basic level.⁵²

⁵² Leezenberg, *Contexts of Metaphor*, 142. Though L&J nod to the constitutive role of culture in experience and concept formation (Lakoff and Johnson, *Metaphors We Live By*, 57), they fail to systematically address it or, as Leezenberg points out, consider its ramifications for conceptual priority. This difficulty speaks to L&J's overall handling of cultural factors, which I will not deal with explicitly in this critique. See Leezenberg, *Contexts of Metaphor*, chs. 1 and 4 for a

As for the second philosophical commitment, inferring conceptual structure from linguistic utterances is a precarious and perhaps inevitably speculative endeavor. Recall Sapir and Whorf's (in)famous hypothesis concerning Inuit words and supposedly corresponding concepts for "snow." on the basis of his claim that language influences mental distinctions and categories, Whorf held that Eskimos, who (appear to) have more words for "snow" than English speakers, must have correspondingly more ways of thinking about the phenomenon. Yet the only evidence given for the supposed cognitive difference is linguistic, namely the very same facts about Eskimo words for "snow." Cognitive semantics critics Gregory Murphy and Matthew McGlone have argued that this circularity, which undid the Sapir/Whorf hypothesis, is at play in L&J. Namely, L&J's groupings of linguistic expressions suggest certain conceptual underpinnings, the only predictions of which are those very linguistic expressions. Language cannot serve, as Murphy puts it, as "both the predictor...and the predicted data."⁵³

Absent independent (i.e. non-linguistic) corroboration of the former, the latter can at best be suggestive. How can one verifiably determine from language alone how "far

thorough theoretical treatment. From a more empirical perspective, Naomi Quinn ("The Cultural Basis of Metaphor," in *Beyond Metaphor: The Theory of Tropes in Anthropology*, ed. James W. Fernández (Stanford University Press, 1991), 56–93) examined the role of culture in American English speakers' metaphors for marriage, similarly challenging L&J's treatment of culture. "...I think, quite contrary to what Johnson and Lakoff seem to be saying, that metaphorical systems or productive metaphors typically do not structure understandings de novo. Rather, particular metaphors are selected by speakers, and are favored by these speakers, just because they provide satisfying mappings onto already existing cultural understandings. (Ibid., 65) She argues further that speakers' "understanding of this story [i.e. their beliefs] about marriage exists, for them, independently of the metaphors they use to talk about marriage." (Ibid., 68)

⁵³ Gregory L. Murphy, "On Metaphoric Representation," *Cognition* 60, no. 2 (1996): 183. See also McGlone, "What Is the Explanatory Value of a Conceptual Metaphor?," 114–15.

down” metaphor goes? Or if its hypostatization at the essentially hidden conceptual level is warranted? To the question “how do you know we conceptualize argument as war?” it is not enough to reply “because we speak of it that way.” Further difficulties with the linguistic evidence, considered presently, will bolster this skepticism.

In the scheme of metaphor studies, the range of linguistic phenomena considered metaphorical by L&J is exceptionally broad. Many usages asserted by L&J to be metaphorical, for example “Inflation has gone up” (an instance of both the ontological metaphor INFLATION IS A SUBSTANCE and the orientational metaphor MORE IS UP⁵⁴), are understood instead by many scholars to be instances of polysemy. That is to say that the meaning of “gone up,”—or, more generally, “to rise”—is general enough to cover increases in various dimensions. Charles Ruhl, for example, argues against views like L&J’s that, without justification, differentiate multiple meanings where a single definition, “unspecified for concrete or abstract.”⁵⁵ The same has been argued for words like “have” and “in” in expressions like “I have troubles” and “I’m in trouble” (putative instances of ATTRIBUTES ARE POSSESSIONS and STATES ARE LOCATIONS respectively)⁵⁶—namely that they can refer, non-metaphorically, to attributes and psychological states as well as objects and locations.⁵⁷

⁵⁴ Lakoff and Johnson, *Metaphors We Live by*, 171.

⁵⁵ Charles Ruhl, *On Monosemy: A Study in Linguistic Semantics* (Albany: SUNY Press, 1989), vii-xiv, 29

⁵⁶ George Lakoff, “The Contemporary Theory of Metaphor,” in *Metaphor and Thought*, ed. Andrew Ortony, 2nd ed (Cambridge, England; New York: Cambridge University Press, 1993), 225.

⁵⁷ McGlone, “What Is the Explanatory Value of a Conceptual Metaphor?,” 123.

L&J's motivation for narrowing the literal meaning of "rise" and most other words to their strictly physical uses is plain: it accords with their central claim that our conceptual system is thoroughly metaphorical and that abstract reasoning takes place via cross-domain mapping from "more clearly delineated" (i.e. physical) arenas of experience to "less clearly delineated" ones (i.e. nonphysical). The psychologist Gregory Murphy challenges this physicalist bias:

L&J assume (rather than explicitly argue) that the real meaning of *rise* is physical rising, and any other kind of increase is a metaphorical meaning. This assumption turns out to be much the same as their theory of concepts applied to language; namely, it says that only simple physical experiences can be directly encoded in linguistic meaning, and nonphysical or abstract relations must be expressed via metaphor. Thus, their claim that *Inflation is rising* is metaphoric is basically an assumption of their theory, rather than evidence for it.⁵⁸

Many scholars of semantics and pragmatics, moreover, challenge the notion of literality altogether, resting as it does on an idealization of linguistic meaning as fixed, stable, and decontextualized.⁵⁹ Both language's inherent semantic fluidity and imprecision and its ineluctable context-dependence argue against what Leezenberg characterizes as a folk-mythological misconception that nonetheless remains a common

⁵⁸ Murphy, "On Metaphoric Representation," 189. More generally, Leezenberg argues: "[C]ognitive semantics presupposes that the domains of 'concrete' physical experience and 'abstract' reasoning and conceptualizing are distinct, even disjunct, classes. This requires the language user to realize that these cognitive domains are distinct from each other before she can even begin to conceptualize abstract domains of experience metaphorically...In other words, cognitive semantics presupposes precisely what it should explain: the emergence of clearly delimited, *distinct* cognitive domains between which metaphorical transfers are to take place." Leezenberg, *Contexts of Metaphor*, 144.

⁵⁹ Leezenberg, *Contexts of Metaphor*, 295–304.

methodological assumption.⁶⁰ Leezenberg claims further that, despite various attempts (e.g. Searle, Davidson), “no strict distinction between literal and metaphorical can be made at either the empirical level of linguistic behavior, or at the theoretical level of semantics or concepts.”⁶¹ That L&J do not argue for the fundamental distinction on which their theory trades is problematic. That they operate with just such a static, decontextualized view of language and concepts as has been widely discredited is not only troublesome, but aligns them with the “objectivist” thinking that they so vociferously attack.⁶²

Several commentators have noted that L&J’s ontological metaphors are conventionally understood more simply as reifications of abstract concepts rather than figurative extensions.⁶³ More importantly, even by L&J’s definition, these should not qualify as true metaphors as it is difficult to see how certain rather vague ontological source domains (e.g. ENTITY, SUBSTANCE, etc.) are “more clearly delineated” than the target domains they are meant to structure (e.g. INFLATION, RUNNING, etc.). This of course begs the question of what is meant by “clearly-delineated.” As with many core terms and concepts that L&J casually employ without rigorously defining, “clearly delineated” is presented as a self-evident, commonsensical notion. The nearest they

⁶⁰ See Ibid., 300–01, where he briefly sketches the history of this folk theory of literal meaning from Genesis to Plato to the present day.

⁶¹ Ibid., 301. Leezenberg bases his conclusions on several studies of categorization and metaphor in non-literate, non-urbanized societies, and of the effect of literacy on conceptualization.

⁶² That they endorse such a stable ontology of meaning is seen not only in their hard distinction between and ready enumeration of literal and figurative meanings, but also in their characterizing essential features of particular concepts (e.g. WAR, JOURNEY, etc.).

⁶³ Leezenberg, *Contexts of Metaphor*, 140.

come to a definition is in their discussion of those kinds of experience that are “understood directly:”

While our emotional experience is as basic as our spatial and perceptual experience, our emotional experiences are much less sharply delineated *in terms of what we do with our bodies*. Although a sharply delineated conceptual structure for space *emerges from our perceptual-motor functioning*, no sharply defined conceptual structure for the emotions emerges from our emotional functioning alone.⁶⁴ [emphasis added]

Even granting for now the equation of perceptual-motor structure with conceptual delineation,⁶⁵ many putative ontological metaphors still do not deserve the name. In what sense are our experiences with entities or substances “sharply delineated in terms of what we do with our bodies”? Surely those categories are far too general to afford any meaningful specification of our perceptual-motor dealings with them. And surely running (or RUNNING), for example, already implicates a highly structured bodily relation. Furthermore, what possible experiential correlation could be posited between SUBSTANCE and RUNNING (and other metaphors of the kind) that could provide the requisite grounding for the conceptual metaphor?

Ontological metaphors, on L&J’s account, allow us to refer to, quantify, and identify features of certain experiences.⁶⁶ But it is not clear in many cases why those purposes could not have been served without conferring substantiality or objecthood

⁶⁴ Lakoff and Johnson, *Metaphors We Live by*, 57–58.

⁶⁵ This claim is not fleshed out until L&J’s 1987 publications and so will be taken up in chapter 2.

⁶⁶ Lakoff and Johnson, *Metaphors We Live by*, 25–27.

on the experience. Would it not suffice, for example, to understand inflation simply as the phenomenon that it (literally) is in order to comprehend (to use L&J's example) the phrase "*more* inflation"? Must it, in other words, be an ENTITY for there to be more or less of it?⁶⁷

L&J's enlargement of the jurisdiction of metaphor results in many other strained and counterintuitive analyses, several discussed below. This is not merely an issue of particular interpretive differences. Rather, one wonders generally about the value of an approach that treats phrases as straightforward as "That was a beautiful catch," and "Did you see the race?" as metaphorical.⁶⁸ "There is an ironic quality to its shortcomings," McGlone incisively summarizes:

[T]he view trumpets the importance of metaphor in human cognition, yet its major flaw is a hyper-literal construal of the relationship between metaphoric language and thought....

Paradoxically, Lakoff couples this hyper-literal model of metaphor understanding to a hyper-metaphoric construal of literal language.⁶⁹

The deficiencies of L&J's linguistic evidence, which consists of short lists of conventional expressions, extend beyond the interpretive ones above. Focusing on the inevitable incompleteness of L&J's collections of expressions, the psychologist Andrew Ortony accuses L&J of methodological legerdemain:

⁶⁷ Ibid., 26. Similarly for "There is so much hatred...", "...a lot of political power" etc.

⁶⁸ Ibid., "catch" and "race" being ontologized in these examples as OBJECTS.

⁶⁹ McGlone, "What Is the Explanatory Value of a Conceptual Metaphor?," 122–23.

Perhaps the failure to address this issue has to do with the fact that the method puts the cart before the horse.... The method is advertised as a discovery procedure, but is in reality a hypothesis confirmation procedure....

What is lacking are constraints on examples and constraints on the metaphors from which they allegedly derive.... As it is, we simply do not know how many missing cases there might be, and whether missing cases would merely reflect incompleteness, or whether they would actually constitute counter-evidence.⁷⁰

This important issue raises another: what would constitute counter-evidence to the existence of specific conceptual metaphors? Two possibilities come to mind: usages that appear to contradict a putative conceptual metaphor (e.g. if happiness were correlated with a “down” term) and instances of typical source domain language that do not appear to instantiate the conceptual meaning (e.g. where “in” seems not to involve CONTAINER or a correlated domain).⁷¹

As an example of the former, if GOOD IS UP and CONTROL IS UP, then we seem to be “messing” in the wrong direction (however fittingly). If HEALTH IS UP, shouldn’t one be “shaken down” after a trauma? Why do couples and cell phone calls “break

⁷⁰ Andrew Ortony, “Are Emotion Metaphors Conceptual or Lexical?,” *Cognition & Emotion* 2, no. 2 (1988): 99–100. See also Ruhl, *On Monosemy*, xiv.

⁷¹ One might object to the latter proposal, claiming that conceptual metaphor theory does not require every “in” to instantiate CONTAINER, every “up” VERTICALITY, etc. I would argue that while L&J do not explicitly state this entailment, neither do they state any other principle that would contradict it. Furthermore, given the keystone claim that our conceptual system is “fundamentally metaphorical in nature” (Lakoff and Johnson, *Metaphors We Live By*, 4) and pervaded by just such basic orientational and ontological metaphors, the burden not only to state that there are exceptions but to justify them rests squarely on L&J. In other words, if it were the case that only certain instances of “in” (or “up,” etc.) and not others invoked CONTAINER (or VERTICALITY, etc.), then a compelling rationale for that distinction would be needed.

up”? For that matter, what would it mean at all for something to break “up”? In other words, as opposed to “breaking *down*,” for which L&J could posit the tendency of broken things to fall to the earth, what experiential correlation could possibly ground “breaking *up*”? As an example of the latter, in what sense do “holed *up*,” “shut *up*,” “make *up*” (either to invent or to reconcile), “close *up*,” “what’s *up*,” “meet *up*,” “wash *up*,” “show *up*,” “let *up*,” “beat *up*,” or “three *up*” (as in “tied at three”), to name just a few, derive their meaning from, or instantiate whatsoever, the concept/schema VERTICALITY?⁷²

L&J generally deal with the former type by postulating a different conceptual metaphor for the seemingly inconsistent expression. As they do not appear to acknowledge the latter type as such, they treat expressions like these as they would any other non-literal “up” expression, namely as implying a conceptual metaphor. This often results in implausible or incoherent interpretations, as the following two cases exemplify.

The latter strategy can be seen in their explanation of the phrase “what’s up:”

FORESEEABLE FUTURE EVENTS ARE UP (and AHEAD) All *up* coming events are listed in the paper. What's coming *up* this week? I'm afraid of what's *up ahead* of us. What's *up*?
Physical basis: Normally our eyes look in the direction in which we typically move (ahead, forward). As an object approaches a person (or the person approaches the object), the object appears larger. Since the ground is perceived as being fixed, the top of the object appears to be moving upward in the person's field of vision.⁷³

⁷² One could equally cite examples for other orientational terms: “show *off*,” “mouth *off*,” “dry *off*,” “top *off*,” etc.

⁷³ Lakoff and Johnson, *Metaphors We Live by*, 16.

Even granting the conceptual metaphor and its experiential basis, “what’s up” cannot be explained by it as that expression refers predominantly to the present (“what is happening”), sometimes to the imperfect past (“what has been going on”), but not to the future.

A more systemic problem can be seen in their discussions of UNKNOWN IS UP; KNOWN IS DOWN:

This conceptual metaphor can be seen in examples like:

That's still up in the air.

I'd like to *raise* some questions about that.

That *settles* the question. It's still *up* for grabs. Let's *bring it up* for discussion.

And the reason that the verb *come* is used in *come up with an answer* is that the answer is conceptualized as starting out DOWN and ending where we are, namely, UP.⁷⁴

In this example, the last sentence is meant to forestall a potential objection to UNKNOWN IS UP on the basis of the apparently conflicting expression “come *up* with an answer.” Their preemptive counterargument is that the phrase is nonetheless consistent with the reigning conceptual metaphor (i.e. KNOWN IS DOWN) and that the “up” in the expression, being paired with “come,” refers to the journey of the answer from DOWN (i.e. KNOWN) to the subject/speaker.

⁷⁴ Ibid., 137.

At least three problems beset this explanation. First, the expression contradicts its supposed conceptual basis. Namely, if their story were correct, the expression should be “the answer came up to me,” not “I came up with the answer.” Second, one “comes up” with questions as well as answers, among other things. But questions, signifying UNKNOWN, cannot rise from below (i.e. KNOWN) to us. Their rationale implies, then, that the “up” for questions is different (i.e. has a different experiential/conceptual basis) than the “up” for answers. Though this falls short of contradiction, it is a rather counterintuitive and convoluted interpretation. Third, according to the experiential origin story—i.e. “it's easier to grasp something and look at it carefully [thereby understanding it] if it's on the ground in a fixed location than if it's floating through the air”⁷⁵—we, the graspers/understanders, are DOWN on the ground. Yet in the above story for “come *up* with an answer” we are UP, as opposed to the ground. Somehow, then, the governing conceptual metaphor is (made) able to cover an expression whose conceptual scheme actually inverts its own.

Contemporaneously with *MWLB*, Susan Lindner offered a more systematic study and explanation of just these types of orientational metaphors. Her 1981 dissertation examined some 1800 VPC's (Verb-Particle Constructions, e.g. “wake up,” “pick out”), including 1200 with “up,” within the framework of Langacker's “space grammar,” which, as the name suggests, is roughly compatible with conceptual metaphor theory. (Johnson, in fact, borrows Lindner's “out” schemata for his 1987 *The Body in the Mind*.) Her aim is to demonstrate the meaningfulness, whether concrete or abstract, of these particles and, moreover, to postulate a comprehensive, hierarchically unified network

⁷⁵ Ibid., 20.

of schematic meanings. In particular she subsumes all “up” VPC’s under two UP schemas (“Vertical UP” and “Goal-oriented UP”), and their roughly two dozen varieties or sub-schemas (e.g. “Compleitive UP,” “UP as path from possession into access,” “Fastening and closure”) with nods to experiential bases and figurative elaborations thereof.

Though many of her analyses and categorizations are compelling, I would contend her project suffers from two deficiencies also applicable to L&J’s. First, particular semantic interpretations seem forced to fit her hypothesis. To substantiate her subcategory of “replicate trajectors” (a type of “Reflexive UP,” itself a type of “Goal-oriented UP”), for instance, she claims that what differentiates “connect up” from “connect” is directness, so that while “connecting” two wires could involve an intermediate wire, “connecting” them “up” necessarily connotes an unmediated attachment.⁷⁶ Of course I cannot demonstrate that this is not so, only pit my and several friends’ intuitions against hers and those of at least some of the dozen colleagues she consulted (consensus was not a prerequisite for inclusion). (Furthermore, that this disagreement, and many others like it, might be attributable to the 30 years and regional dialect that separate us is, I would argue, a significant problem for approaches that make conceptual claims about “English” as if it were stable across time and place.) In others, she mistakes the semantic contribution of the particle for the contextual meaning of the expression. For example, she uses the phrase “they wrote the party up in the paper” as an example of UP ‘denoting a change in someone’s opinion of something for the better’ (hence movement upward along a

⁷⁶ Susan Lindner, “A Lexico-Semantic Analysis of English Verb Particle Constructions with Out and Up” (PhD diss., University of California, San Diego, 1981), 188.

metaphorical vertical axis).⁷⁷ I would argue that “write up” (or what differentiates it from simply “write”) has nothing to do with praise or promotion (which “party” might mislead one to think), as anyone who has been “written up” for a speeding ticket can confirm.⁷⁸

Second, in order to incorporate such varied usages and meanings into a unified scheme, the latter is stretched so far and made so general as to hardly seem meaningful at all. Lindner asserts that “UP paths have as either point of departure or as goal a region which we may call the region of interactive focus – the realm of shared experience, existence, action, function, conscious interaction and awareness.”⁷⁹ With criteria this vague and inclusive (note especially that UP paths can be approaching *or* departing the region of interactive focus), it is hardly surprising that so many “up” VPC’s could be accounted for, especially given Lindner’s charitable interpretations. Lindner finds (or is compelled to find) UP in some obscure places often via tortuous conceptual logic. She claims, for instance, that “giving up” involves ‘sacrificing’ or ‘relinquishing’ to an implied “dominating force,” “pressure,” or “reason” (that is conceived as “above”).⁸⁰ To explain “ate it up” as an example of “Compleitive UP,” the completion must be conceptually inverted so that “the processed region is the ghost of what was there before it was eaten.”⁸¹ Again, one cannot show that interpretations like

⁷⁷ Ibid., 159.

⁷⁸ See also “linked” v. “linked up” (Ibid., 186) and “took” v. “took up” (Ibid., 161).

⁷⁹ Lindner, “A Lexico-Semantic Analysis of English Verb Particle Constructions with Out and Up,” 171.

⁸⁰ Ibid., 170.

⁸¹ Ibid., 195.

these are wrong, only submit that their strained quality points to a faulty hypothesis and a problematic hypothesis confirmation methodology.

L&J's hyper-literal approach to language forces them to construct similarly tortured logics, exemplified above with "what's up" and UNKNOWN IS UP; KNOWN IS DOWN. Note, however, that none of my objections constitute a hard disproof of the theory itself. The first example suggests only that the programmatic explanation of the expression "what's up" is unsuccessful, not that one is inherently impossible. And though their attempt to explain "come up with an answer" is tenuous, it is not technically refutable. There is always another origin story to supply, another twist to the conceptual logic, another conceptual metaphor to posit to save L&J from contradiction.

But this turns out to be not a strength of the theory, but a major weakness. The kind of quasi-logic combined with just-so origin stories exemplified above is L&J's *modus operandi*. The generality and inherent relativity of schemas like UP-DOWN, IN-OUT, etc. only lends further malleability to their interpretations. These features, along with the lack of constraints on positing conceptual metaphors and the lack of evidential criteria for substantiating them, make their system so pliable, their rationales so amenable to convenient massaging as to render the theory non-falsifiable and, conversely, non-verifiable.

Leaving these larger methodological issues aside, the linguistic evidence itself suffers from several limitations, not least of which that it falls short of substantiating L&J's claims. Strictly speaking, the most their lists can show is a possible association or thematic parallelism between certain expressions and certain concepts—*possible* because their particular groupings of expressions, though presented as self-evident, are

often open to entirely different, but no less plausible, interpretations.⁸² The linguist Verena Haser, in her extended critique of cognitive semantics, offers just such a rearrangement of L&J's evidence for ARGUMENT IS WAR. In place of subsuming their various examples (here reduced to key words) under one conceptual metaphor, she offers three alternative source domains (and hence conceptual metaphors) for the same expressions:⁸³

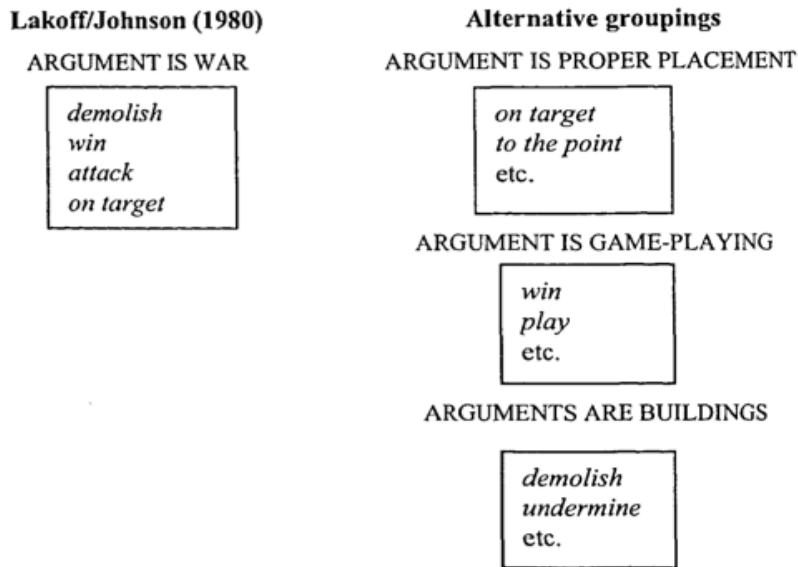


Figure 1.1 Haser's alternative groupings of ARGUMENT IS WAR

There is no principle in their system that can prefer or prioritize their categorization over hers. At stake, then, is "whether there is generally a *fact of the matter* as to which metaphorical concept(s) posited is (are) preferable."⁸⁴ Haser argues convincingly in the negative. As L&J allow for the possibility of multiple source

⁸² Haser, *Metaphor, Metonymy, and Experientialist Philosophy*, 147.

⁸³ *Ibid.*, 174.

⁸⁴ *Ibid.*, 176.

domains for the same target (e.g. LOVE IS A JOURNEY, LOVE IS MADNESS, etc.), one might counter that this presents no difficulty. Recall, however, that L&J's metaphors are meant to refer to a mental reality—i.e. that the posited source domain is actually accessed mentally in the creation and comprehension of relevant expressions.⁸⁵ Furthermore, if all possible source domains for all figurative words used in the context of the target domain are accounted for (i.e. all source domains in which “win”, “defend”, etc. can be used literally), the number of conceptual metaphors at play proliferates and L&J's account strains cognitive plausibility.⁸⁶

Equally importantly, Haser's groupings call into question the very method and rationale for L&J's positing ARGUMENT IS WAR at all. Leaving aside the largely tacit criteria for determining the literality or figurality of usages, it is clear that every expression adduced to support ARGUMENT IS WAR can be traced to at least one different source domain.⁸⁷ Nor would these alternative domains be relatively impoverished or tenuous, as many more corroborating expressions can be instanced

⁸⁵ E.g. Lakoff, “The Contemporary Theory of Metaphor,” 245.

⁸⁶ Haser, *Metaphor, Metonymy, and Experientialist Philosophy*, 176.

⁸⁷ See also Max Black, “Review of George Lakoff and Mark Johnson ‘Metaphors We Live By,’” *The Journal of Aesthetics and Art Criticism* 40, no. 2 (1981): 209.

for each.⁸⁸ Moreover, many of L&J's examples, for instance "demolish" and "win," do not appear to be even primarily connected to the domain of war.⁸⁹

How, then, do L&J arrive at WAR as the definitive source domain? The implicit claim is that the force of the linguistic evidence leads naturally to that determination, that the common denominator suggests itself.⁹⁰ Yet, as has been argued, their classification of their collection is in fact far from self-evident or objective. In other words, ARGUMENT IS WAR appears to be less the natural conclusion of the evidence than a largely unsupported assumption of the theory. As Haser puts it, "[c]onceptual metaphors reflect the preconceived grid superimposed by linguists on actual linguistic expressions...disparate source domains will be posited depending on the selection of items taken into consideration. Which source concept will be chosen is largely a matter of *ad hoc* decisions."⁹¹

Several commentators have also questioned the designation, or rather, seeming arbitrariness of the category level for ARGUMENT IS WAR and conceptual metaphors

⁸⁸ This is the "etc." in Haser's diagram. See Haser, *Metaphor, Metonymy, and Experientialist Philosophy*, 179–89, pp. 179–89 for extensive exemplification. For the ARGUMENT IS GAME-PLAYING, for instance, we have *win, lose, gambit, trump card, lay one's cards on the table, strategize, rules* etc. This is not to imply, however, that L&J require a minimum of expressions to justify the positing of a conceptual metaphor. Indeed, their discussion on p.54 of *MWLB* arguably implies that a single expression may suffice.

⁸⁹ Ibid., 178. Of course this begs the question of the method and rationale for determining literal/figural. Haser bases her assertions on etymology and intuition/common sense, which is at least as rigorous as L&J's apparent criteria.

⁹⁰ Note, as asserted above, that the intuitive/psychological claim that we in fact conceptualize argument as war (and reason accordingly) cannot count as evidence, as the only proof of that hidden reality is, in turn, the linguistic expressions.

⁹¹ Haser, *Metaphor, Metonymy, and Experientialist Philosophy*, 192. See also Leezenberg, *Contexts of Metaphor*, 140–41, who makes the same accusation about image schema determinations.

generally.⁹² The determination of generality/specificity of domains is left unsystematized in *MWLB*. Jackendoff and Aaron, in their review of Lakoff and Turner's *More than Cool Reason: A Field Guide to Poetic Metaphor*, remark on the lack of justification for positing LIFE IS A FIRE for a particular phrase rather than the more general LIFE IS SOMETHING THAT GIVES OFF HEAT or the more specific LIFE IS A FLAME.⁹³ This is not merely a semantic or technical concern, for these alternative source domains carry substantially divergent conceptual (and hence verbal) entailments. Nor can one appeal to the coherence of the set of linguistic expressions to justify the category level of a source domain, as the very selection of that set has been shown to be somewhat arbitrary. Thus the problem of category level is entangled in the problems of source domain attribution and linguistic expression selection presented above.

Part of the reasoning for choosing WAR may in fact be given by L&J themselves, though unwittingly. In a discussion of the difference between metaphorical structuring and subcategorization, L&J assert that the breadth of one's literal concept of FIGHT (i.e. whether it includes psychological as well as physical dominance and pain), determines whether the formulation ARGUMENT IS FIGHT is a metaphor (if FIGHT is defined narrowly) or a subcategorization (if FIGHT is defined broadly), in which latter case ARGUMENT IS FIGHT would be literal, i.e. not a conceptual

⁹² Jackendoff and Aaron, "Review Article: More Than Cool Reason: A Field Guide to Poetic Metaphor, by George Lakoff and Mark Turner," 324–25; Haser, *Metaphor, Metonymy, and Experientialist Philosophy*, 177–79.

⁹³ Jackendoff and Aaron, "Review Article: More Than Cool Reason: A Field Guide to Poetic Metaphor, by George Lakoff and Mark Turner," 324. Similarly, Black wonders why L&J's evidence for ARGUMENT IS WAR could not equally lead to formulations like AN ARGUMENT IS A DUEL or A VERBAL DISPUTE IS A BATTLE. Black, "Review of George Lakoff and Mark Johnson 'Metaphors We Live By,'" 209.

metaphor.⁹⁴ In other words, ARGUMENT IS WAR, the centerpiece case of *MWLB*, may have been chosen over the more general (and for several reasons more sensible⁹⁵) ARGUMENT IS FIGHT for the simple but crucial reason that the latter might not qualify, by L&J's own criteria, as a conceptual metaphor.

Despite these technical and conceptual deficiencies, somehow the intuitive appeal of conceptual metaphor theory (and the often underlying image schemas) persists. One does, after all, seem to feel embattled when in an intense argument. Common sense wonders how one could speak of *constructing* a theory, *falling in* love, or *wasting* time and readily understand myriad other like expressions if there were no underpinning conceptual mapping?

⁹⁴ Lakoff and Johnson, *Metaphors We Live by*, 84.

⁹⁵ To begin with, FIGHT is more inclusive than WAR without losing meaningful particulars (since the particulars of WAR which differentiate it from FIGHT basically coincide with the "unused" part of WAR anyway). Furthermore, it is difficult to make the case that WAR is more concretely structured and experientially basic than ARGUMENT, a prerequisite for its ability to metaphorically structure it. For one, we argue well before we are aware of war, but probably fight before we argue. In fact, L&J struggle to make this argument by appealing to a speculative socio-evolutionary story wherein "we humans have evolved the social institution of verbal argument" as a way of "getting what [we] want without subjecting [ourselves] to the dangers of actual physical conflict." (*MWLB*, 62.) Despite this sublimation of our animal instinct, even our most rational, ostensibly pacific arguments are "still comprehended and carried out in terms of WAR." (Ibid., 63) Thus the usual ontogenic story is replaced with a phylogenic one. This move seemingly allows them to obviate the experiential priority of ARGUMENT over WAR. Thus, "[e]ven if you have never fought a fistfight in your life, much less a war, but have been arguing from the time you began to talk, you still conceive of arguments, and execute them, according to the ARGUMENT IS WAR metaphor because the metaphor is built into the conceptual system of the culture in which you live." (Ibid., 64) But this is a tenuous and ultimately self-defeating argument for several reasons. First, notice that this argument should favor FIGHT, not WAR, for ARGUMENT'S source domain. Second, the phylogenic appeal, substantiated by arguable etiology, severely weakens the evidential criteria for conceptual metaphors generally so that even if experience contradicts a mapping, a cultural story may still be concocted to save it (see also my chapter 2 on the problematic conflation of ontogeny and phylogeny in image schema theory). Third, the cultural-evolutionary story only defers, rather than solves, the problem – that is, it begs the question of how WAR came to structure ARGUMENT in the first place.

A clever experiment by the psychologists Keysar and Bly, however, suggests that we may in fact be particularly susceptible to explanations of the kind offered by L&J and that their apparent intuitive resonance may be the result of post-hoc rationalization.⁹⁶ If, as L&J claim, idiom transparency (i.e. a native speaker's intuitive comprehension of an idiom, e.g. *spill the beans*) is a function of underlying and independently existing conceptual structure,⁹⁷ it follows, Keysar and Bly reason, that an idiom's opacity should reflect the *lack* of motivating conceptual structure. In other words, for idiom comprehension to count as evidence of conceptual structure it must in principle, by Popper's criterion, be able to provide negative evidence—that is, in addition to demonstrating how an idiom means what it does, one must show what it *cannot* mean.

Keysar and Bly assert that the theory of conceptual metaphor cannot in principle provide that kind of evidence since idiom transparency (or opacity) is a function of what the speaker already knows, or was taught to think, it means. Thus an idiom's opacity is not a result of a lack of motivating conceptual structure, and indeed idioms could have meant their opposites (e.g. “spill the beans” could have meant “to keep a secret”) if only they didn't already have their meanings. To substantiate this claim, Keysar and Bly introduced 15 obsolete idioms, for instance “the goose hangs high,” to two subject groups: one was taught the correct meaning (in this case, “things are looking good”) and the other its opposite (“things are looking bad”). Subjects were

⁹⁶ Boaz Keysar and Bridget Bly, “Intuitions of the Transparency of Idioms: Can One Keep a Secret by Spilling the Beans?,” *Journal of Memory and Language* 34, no. 1 (1995): 89–109; Boaz Keysar and Bridget Bly, “Swimming against the Current: Do Idioms Reflect Conceptual Structure?,” *Journal of Pragmatics* 31, no. 12 (1999): 1559–78.

⁹⁷ Lakoff, *Women, Fire, and Dangerous Things*, 449.

then asked to predict a stranger's interpretation of the idiom if heard in a neutral context. For 80% of the idioms, a significant majority of subjects predicted the stranger's interpretation would align with their own, in other words, that they had come to regard the meaning they learned as more sensible than its opposite.⁹⁸

It appears, then, that, for idioms at least, L&J's story is backwards: conceptual structures do not motivate meaning, rather meaning motivates rationalizing strategies that can then, by mistaking the *post hoc* for *propter hoc*, be misinterpreted as its cause.⁹⁹ The authors incisively generalize this methodological error:

This is a problem for theories that postulate motivating conceptual structures, because the discovery of underlying conceptual structures seems to depend on knowing the meaning of the idiom. This raises the possibility that meanings may suggest conceptual structures that do not exist independently, but rather are the *result* of knowing the meaning. They only *seem* to have independent existence because we do not recognize the effect of knowing the meaning of the idiom.¹⁰⁰

⁹⁸ Keysar and Bly, "Intuitions of the Transparency of Idioms," 96–98. Sam Glucksberg, Mary Brown, and Matthew McGlone, "Conceptual Metaphors Are Not Automatically Accessed During Idiom Comprehension," *Memory & Cognition* 21, no. 5 (1993): 712. Note additionally that subjects were apparently just as intuitively satisfied by the incorrect meaning, despite its dissonance with the putatively regnant orientational metaphor GOOD IS UP.

⁹⁹ This type of fallacy is at the heart of Merleau-Ponty's critique of the "intellectualist" (cognitivist) approach to the concept of "attention," prompting Hubert Dreyfus to call it the "attention fallacy." Similarly, Eugene Gendlin's critique of Johnson's image schemata centers on the same accusation. Both points will be taken up in the phenomenological critique.

¹⁰⁰ Keysar and Bly, "Swimming against the Current," 1571.

Thus, “[i]nstead of serving as a linguistic window onto conceptual structure, idiomatic expressions may *mirror* the content put into them. And just like mirrors, they might be mistaken for windows.”¹⁰¹

Several other experiments have cast doubt on the role of conceptual structure in speaker comprehension of metaphor. Recall that L&J claim not only that metaphors are subtended by conceptual mappings, but also that source domains are actually accessed, if unconsciously, in linguistic comprehension.¹⁰² Glucksberg, Brown, and McGlone demonstrated that while speakers could make use of conceptual metaphor structures in situations that allowed for deliberate consideration,¹⁰³ they did not appear to access such structures in automatic comprehension.¹⁰⁴ In the experiment by Nayak and Gibbs to which theirs responds,¹⁰⁵ subjects were asked to judge the suitability of idioms in given contexts. For instance, after reading a paragraph describing “Susan” as “tense,” “fuming,” and “getting hotter”, with “the pressure...really building up” as she waited for a tardy “Chuck,” subjects rated the appropriateness of two possible concluding idioms: when Chuck finally arrives, Susan either “blew her top” or “bit his head off.”¹⁰⁶ That subjects tended to prefer the former, which is consistent with the

¹⁰¹ Ibid., 1560.

¹⁰² “The system of conventional conceptual metaphor is mostly unconscious, automatic, and is used with no noticeable effort, just like our linguistic system and the rest of our conceptual system.” Lakoff, “The Contemporary Theory of Metaphor,” 245.

¹⁰³ Incidentally, this would support Keysar and Bly’s post-hoc rationale explanation.

¹⁰⁴ Glucksberg, Brown, and McGlone, “Conceptual Metaphors Are Not Automatically Accessed During Idiom Comprehension.”

¹⁰⁵ Nandini P. Nayak and Raymond W. Gibbs, “Conceptual Knowledge in the Interpretation of Idioms,” *Journal of Experimental Psychology: General* 119, no. 3 (1990): 315–30.

¹⁰⁶ Glucksberg, Brown, and McGlone, “Conceptual Metaphors Are Not Automatically Accessed During Idiom Comprehension,” 712.

conceptual metaphor ANGER IS HEATED FLUID UNDER PRESSURE¹⁰⁷ that permeates the paragraph, led Nayak and Gibbs to conclude not only that conceptual metaphors play an important role in idiom comprehension, but that because of its inconsistency with the regnant metaphor, the latter idiomatic alternative was more difficult for subjects to comprehend.

Glucksberg, Brown, and McGlone duly criticize this overly generous interpretation, reasoning that the appropriateness ratings “may not be the product of ease of comprehension at all, but rather the outcome of postcomprehension decision and judgment processes,” reflecting a natural preference for thematic and semantic consistency. Moreover, even if decisions were made pre-consciously, the results could be, more simply, a result of lexical priming.¹⁰⁸ Of course these alternative explanations *per se* discredit neither conceptual metaphor generally nor its hypothesized role in automatic (unconscious) comprehension. To test the latter directly, Glucksberg, Brown, and McGlone measured subjects’ reading speeds of “analogically consistent” versus “inconsistent” idioms that followed a prompting paragraph (much as in the Nayak and Gibbs experiment).¹⁰⁹ In two versions of this experiment they found no difference in reading times and thus no correlation between analogical consistency and ease of comprehension.

Similarly, Gluckberg, Keysar, and McGlone, in response to Gibbs, argued that “people need not access conventional metaphoric mappings when interpreting either

¹⁰⁷ Lakoff, *Women, Fire, and Dangerous Things*, 380 ff.

¹⁰⁸ Glucksberg, Brown, and McGlone, “Conceptual Metaphors Are Not Automatically Accessed During Idiom Comprehension,” 712.

¹⁰⁹ *Ibid.*, 714. Subjects were required to score perfectly on content questions for their speed data to count.

novel or conventional metaphors.”¹¹⁰ Their experiment centered on three metaphoric expressions given by Gibbs: “Our love is a bumpy roller coaster ride,” “Our love is a voyage to the bottom of the sea,” and “Our love is a dusty road traveled,” all instantiations of the putative LOVE IS A JOURNEY. Gibbs hypothesized that if the meanings of these phrases are indeed governed by conceptual metaphorical mappings, then their interpretations should include conventional journey-related properties and “convey slightly different entailments about love.”¹¹¹ Glucksberg, Keysar, and McGlone had subjects paraphrase the three sentences and found that interpretations varied substantially and rarely mentioned journey-related content.¹¹² These results were consistent, however, with the “class-inclusion model” of metaphorical meaning propounded by the authors. In their view, “metaphors of the form ‘*a is b*’ are directly understood as class-inclusion assertions,” wherein *a* (the “topic”) is assigned to the category prototypified by *b* (the “vehicle”).¹¹³ Thus topic meaning and metaphorical interpretation should, and indeed did, reflect “the specific properties of the metaphor vehicle attributive category [i.e. *b*].”¹¹⁴ Similar experiments by Glucksberg and

¹¹⁰ Sam Glucksberg, Boaz Keysar, and Matthew McGlone, “Metaphor Understanding and Accessing Conceptual Schema: Reply to Gibbs (1992),” *Psychological Review* 99, no. 3 (1992): 579.

¹¹¹ Raymond W. Gibbs, “Categorization and Metaphor Understanding,” *Psychological Review* 99, no. 3 (1992): 573.

¹¹² Glucksberg, Keysar, and McGlone, “Metaphor Understanding and Accessing Conceptual Schema: Reply to Gibbs (1992),” 571, 589.

¹¹³ *Ibid.*, 578.

¹¹⁴ *Ibid.*, 579. In other words, subject paraphrases had much more to do with the particular vehicle of the given metaphor (roller coasters, sea bottoms, and dusty roads, respectively) than the hypothesized governing mapping LOVE IS JOURNEY. The “class-inclusion model” has much in common with Haser’s Wittgensteinian “family resemblance” approach, alluded to below. It is beyond the scope of this project to fully elaborate these alternative approaches to metaphor. I broach them only to broaden the context for appraising L&J’s approach and to

McGlone in 1999 and McGlone in 1996 showed no agreement concerning underlying metaphor among subjects' interpretations of metaphorical expressions.¹¹⁵

The problem of comprehensional irrelevance, however, is deeper than experimental invalidity, for it is not even clear that L&J's handpicked examples can *theoretically* rely on their posited conceptual metaphors for meaning. In an extension of her criticism of the arbitrariness of ARGUMENT IS WAR (reprised above), Haser focuses on twelve expressions adduced by L&J for LOVE IS A JOURNEY:

Look how far we've come.
It's been a long, bumpy road.
We can't turn back now.
We're at a crossroads.
We may have to go our separate ways.
The relationship isn't going anywhere.
We are spinning our wheels.
Our relationship is off the track.
The marriage is on the rocks.
The marriage is out of gas.
We're trying to keep the relationship afloat.
We may have to bail out of this relationship.¹¹⁶

show some obvious advantages they have over it. For more on the "class-inclusion model", see Sam Glucksberg and Boaz Keysar, "Understanding Metaphorical Comparisons: Beyond Similarity," *Psychological Review* 97, no. 1 (1990): 3–18. For more on Haser's approach, see Haser, *Metaphor, Metonymy, and Experientialist Philosophy*, especially pp.224-36.

¹¹⁵ Sam Glucksberg and Matthew McGlone, "When Love Is Not a Journey: What Metaphors Mean," *Journal of Pragmatics* 31, no. 12 (1999): 1541–1558; Matthew S. McGlone, "Conceptual Metaphors and Figurative Language Interpretation: Food for Thought?," *Journal of Memory and Language* 35 (1996): 544–65.

¹¹⁶ Lakoff and Johnson, *Philosophy in the Flesh*, 64; Lakoff, "The Contemporary Theory of Metaphor," 206, as listed in Haser, *Metaphor, Metonymy, and Experientialist Philosophy*, 227.

How necessary, as L&J claim, or even relevant, is LOVE IS A JOURNEY to the meanings of these phrases? Put differently, how many of these phrases actually insinuate JOURNEY or are necessarily about LOVE? Haser notes that “keep afloat,” for example, requires no notion of journey or travel to attain its meaning, only the contrast between above and under water, with their connotations of safety and danger.¹¹⁷ In fact, with the possible exception of “long, bumpy road,” none of the above phrases *per se* necessitate either journey- or love-related notions.¹¹⁸

Even that expression, however, occurs in a wide variety of contexts apart from LOVE—a quick Internet search yields the “target domains” of sports, business, public policy, and publication, among others. This implies, for L&J, a separate structuring metaphor for each instance of the form _____ IS A JOURNEY, without which the phrase would be unintelligible. As Haser argues, “if LOVE IS A JOURNEY is needed to account for *bumpy road* in the context of love, an infinite number of other metaphors is needed to explain the use of the phrase in countless other contexts in which it can be employed.”¹¹⁹ But this is needlessly cumbersome and cognitively implausible. “A far simpler solution is to say that there is a metaphorical correspondence between long, bumpy roads and difficult undertakings, which can be applied to an infinite number of target contexts.”¹²⁰

¹¹⁷ Haser, *Metaphor, Metonymy, and Experientialist Philosophy*, 228.

¹¹⁸ Leezenberg, *Contexts of Metaphor*, 140 similarly questions the relevance of putative conceptual metaphors for the given expressions, for example “He broke down,” which is supposed to be governed by THE MIND IS A MACHINE (Lakoff and Johnson, *Metaphors We Live By*, 28).

¹¹⁹ Haser, *Metaphor, Metonymy, and Experientialist Philosophy*, 229.

¹²⁰ *Ibid.*, 229–30. The same argument can be made for the rest of L&J’s examples.

Conversely, that “long, bumpy road” (and the other metaphorical phrases above) has the same meaning across all domains—a fact contradicted by L&J’s assertion of different conceptual metaphors for each target—implies that LOVE IS A JOURNEY plays no part in either constructing or constraining its meaning. In turn, none of their examples can provide evidence for its existence.¹²¹ Remarkably, L&J’s evidence for LOVE IS A JOURNEY does as good a job of undermining the fundamental tenets of conceptual metaphor theory as supporting them.

Thus far, in focusing on L&J’s attempt to derive conceptual metaphors from linguistic ones, I have noted its questionable philosophical underpinnings and several difficulties attending the radical expansion of metaphor’s purview, including a physicalist bias, their presumption of a fraught literal/figurative dichotomy, and the failure of their “ontological metaphors” to live up their name. I have argued that the theory’s systematic permissiveness along with L&J’s expediently malleable conceptual logic and just-so origin stories allow for the perpetual evasion of falsification. I have highlighted various problems with the linguistic evidence, including its inherent incompleteness, the arbitrariness of source domain designations, and L&J’s *ad hoc* classification of the conceptual metaphors that govern them. A number of experiments have suggested that the theory’s intuitive appeal is a result of post-hoc justification and that conceptual metaphors play no role in automatic comprehension or interpretation. Finally, Haser has demonstrated that L&J’s own evidence undermines their theory and points instead to a considerably simpler and more cognitively plausible theory of metaphorical meaning.

¹²¹ Ibid., 230–32.

From Source to Target

Difficulties, deficiencies, and inconsistencies persist in L&J's account of metaphorical mapping dynamics, the most glaring being their failure to sufficiently define and defend the cognitive process of "structuring" (i.e. of target by source domain) that is central to their theory. This lacuna prompted Murphy, a critic of cognitive semantics, to postulate two possible views, "strong" and "weak," derived by inference from L&J's writings.¹²² For Murphy, the question of structure, and cross-domain mapping generally, hinges on the representational status of the target domain, that is, whether the target concept, say ARGUMENT, possesses an independent mental representation. In the "strong view," where it does not, the source domain obtains all of its structure from the target domain. In other words, the mental representation for ARGUMENT would consist solely of mappings or references to WAR (e.g. arguers → combatants, criticism → attack, etc.). "In a real sense," Murphy explains, "one does not really understand an argument - one only understands war, and the understanding of arguments is parasitic on this concept."¹²³ In the "weak view," the target domain is independently structured, but the "existence of systematic verbal metaphors in our culture," it could be argued, has exerted an influence on its content and structure.¹²⁴

Though the "strong view" may seem extreme or implausible at first blush (for reasons considered presently), several passages in L&J ostensibly support it, not least their very definition of conceptual metaphor as "understanding and experiencing one

¹²² Murphy, "On Metaphoric Representation," 176–79.

¹²³ Ibid., 178.

¹²⁴ Ibid., 177.

kind of thing in terms of another.”¹²⁵ Neither does their later explanation appear to stray from this view:

[M]any aspects of our experience cannot be clearly delineated in terms of the naturally emergent dimensions of our experience. This is typically the case for human emotions, abstract concepts, mental activity, time, work, human institutions, social practices, etc., and even for physical objects that have no inherent boundaries or orientations. Though most of these can be *experienced* directly, none of them can be fully comprehended on their own terms. Instead, we must understand them in terms of other entities and experiences, typically other *kinds* of entities and experiences.¹²⁶

Though the qualifiers “clearly delineated” and “fully” could, depending on their intended meaning, imply a slightly different view, neither term is in fact clearly or fully delineated by L&J.¹²⁷ Certainly, though, if “we *must* understand” target concepts in other terms, they must not have independent mental representation. This inference is corroborated by their assertion that *all* of our various understandings of time are “relative to other concepts such as motion, space, and event.”¹²⁸ Similarly, in perhaps the clearest statement of the strong view, L&J state, “LOVE is not a concept that has a clearly delineated structure; what-ever structure it has it gets only via metaphors.”¹²⁹

¹²⁵ Lakoff and Johnson, *Metaphors We Live by*, 5.

¹²⁶ Ibid., 177.

¹²⁷ See, for example, Ibid., 114.

¹²⁸ Lakoff and Johnson, *Philosophy in the Flesh*, 137.

¹²⁹ Lakoff and Johnson, *Metaphors We Live by*, 110. Though earlier (p.85) they write, “[t]he concept LOVE, for example, is structured *mostly* in metaphorical terms.” [my emphasis] This inconsistency and confusion about the nature of structure underlies a major difficulty in their theory, discussed presently.

The shortcomings of Murphy's postulated strong view are considerable. Without at least minimal representation in the target domain, it is hard, if not impossible, to imagine how source domain elements (e.g. combatant) could become correlated with target domain elements (e.g. arguer) that have no cognitive actuality.¹³⁰ Even if this were achievable, the absence of an independent target domain structure would render the mind incapable of preventing incorrect inferences, for instance that arguments not only involve a kind of battle but also involve infantry, MIA's, reparations, etc.¹³¹ McGlone goes a step further, arguing that "[a] conceptual system arranged in this fashion would seem incapable of generating propositions about abstract concepts with figurative intent. For example, a conceptual system whose knowledge of theories was a subset of building knowledge should assume that theories are not merely metaphoric 'buildings,' but literal buildings!"¹³²

Murphy's criticism of the weak view, though astute, is beside the point. As Haser rightly points out, the weak view, according to which language influences conceptual structure, is fundamentally at odds with L&J, who claim precisely the opposite. Murphy's framing of the pivotal issue of domain structuring nonetheless remains illuminating. Indeed, it is perhaps just such concerns that led L&J to refine that aspect of their theory post-*MWLB* with Lakoff's "invariance principle:"

¹³⁰ McGlone, "What Is the Explanatory Value of a Conceptual Metaphor?," 113–14.

¹³¹ Murphy, "On Metaphoric Representation," 180–81.

¹³² McGlone, "What Is the Explanatory Value of a Conceptual Metaphor?" 122. See also Leezenberg, *Contexts of Metaphor*, 256.

Metaphorical mappings preserve the cognitive topology (that is, the image-schema structure) of the source domain, in a way consistent with the inherent structure of the target domain.¹³³

Informally, Lakoff offered Murphy a (doubly apposite) bodily metaphor to explain his position: the minimal inherent structure of the target domain is the skeleton that the source domain fleshes out.¹³⁴ It is the skeleton, then, which is meant to constrain mappings and inferences, preventing false ones as above. For Murphy, however, this leads to an aporia:

The "flesh" added to the skeleton is an example of the strong view of metaphoric representation.... [T]here is no direct representation of this metaphoric material, which results in the same problems as were raised for the strong view of metaphoric representation. In particular, what is to stop people from making inferences that are empirically incorrect about the target domain? That is, without more content in the *argument* concept, the ARGUMENT IS WAR metaphor would allow people to infer that guns are used, etc. In order to prevent this, the skeleton must be detailed enough to specify which inferences are permissible and which are not: No one infers that guns are used in arguments, because one already knows that they are not. However, this turns out to be simply a form of direct representation after all, since the inherent structure of the domain must be detailed enough to determine what can and cannot be said about the concept. That is, if the skeleton (or other literal information in memory) truly prevents the incorrect inferences, then the concept seems to be directly represented; if it cannot prevent them, then it is empirically incorrect. Thus, the skeleton needs to be both

¹³³ Lakoff, "The Contemporary Theory of Metaphor," 215. In relation to Murphy's critique, it is interesting to note that the earlier version, called the "invariance hypothesis," lacked the final clause (i.e. "in a way..."). See George Lakoff, "The Invariance Hypothesis: Is Abstract Reason Based on Image-Schemas," *Cognitive Linguistics* 1, no. 1 (1990): 57.

¹³⁴ Murphy, "On Metaphoric Representation," 187.

extensive (to prevent incorrect inferences) and minimal (to allow metaphoric mappings).¹³⁵

Damaging as this analysis is, even deeper problems issue from the invariance principle. Consider the continuation of Lakoff's above exposition, presented in the context of his discussion of CLASSICAL CATEGORIES ARE CONTAINERS and LINEAR SCALES ARE PATHS:¹³⁶

What the Invariance Principle does is guarantee that, for container schemas, interiors will be mapped onto interiors, exteriors onto exteriors, and boundaries onto boundaries; for path-schemas, sources will be mapped onto sources, goals onto goals, trajectories onto trajectories; and so on."¹³⁷

This reasoning is blatantly circular, for it is only as a result of the mapping itself that the target domain obtains image-schematic structure (i.e. that we can speak, metaphorically, of putting something *in* a category, etc.). That CLASSICAL CATEGORIES do not inherently have exteriors, interiors, or boundaries is precisely the

¹³⁵ Ibid.

¹³⁶ I.e. "Classical categories are understood metaphorically in terms of bounded regions, or 'containers.' Thus, something can be in or out of a category, it can be put into a category or removed from a category, etc. The logic of classical categories is the logic of containers....If X is in container A and container A is in container B, then X is in container B. This is true not by virtue of any logical deduction, but by virtue of the topological properties of containers..." and, similarly, the linguistic-inferential content of PATHS is mapped onto LINEAR SCALES, allowing us to say and reason (using Lakoff's example) that if "Bill's intelligence goes beyond Phil's" and "John is far more intelligent than Bill," then "John's intelligence is way ahead of Phil's." Lakoff, "The Contemporary Theory of Metaphor," 214.

¹³⁷ Ibid., 215.

motivation for its borrowing the language and logic of the more concrete CONTAINERS.¹³⁸ Remarkably, Lakoff warns against this understanding—despite having just asserted that “classical categories are understood *metaphorically* in terms of bounded regions, or ‘containers’”¹³⁹—in favor of the incoherent one:

To understand the Invariance Principle properly, it is important not to think of mappings as algorithmic processes that *start* with source domain structure and wind up with target domain structure. Such a mistaken understanding of mappings would lead to a mistaken understanding of the Invariance Principle, namely, that one first picks all the image-schematic structure of the source domain, then one copies it onto the target domain unless the target domain interferes. One should instead think of the Invariance Principle in terms of constraints on fixed correspondences: If one looks at the existing correspondences, one will see that the Invariance Principle holds: source domain interiors correspond to target domain interiors; source domain exteriors correspond to target domain exteriors; etc.¹⁴⁰

Again, no image-schematic correspondences exist until the mapping creates them. But an entity cannot create the conditions of its own existence. Conceptual metaphors cannot both ground and be grounded by the same experience. The problem is not just that the invariance principle is nonsensical, but that it intensifies Murphy’s paradox. To wit, if structural (i.e. image-schematic) correspondences already exists (i.e. if the target domain has inherent image-schematic structure and its concomitant linguistic-inferential patterns), there would be no motivation for or benefit from a cross-domain

¹³⁸ For a similar argument, see Haser, *Metaphor, Metonymy, and Experientialist Philosophy*, 150.

¹³⁹ Lakoff, “The Contemporary Theory of Metaphor,” 212. [emphasis added]

¹⁴⁰ *Ibid.*, 215.

mapping. If, on the other hand, structure is indeed exported from source to target domain, then difficulties attending the strong view apply. Haser aptly summarizes this core confusion: “The ambivalence concerning the question whether metaphors impose structures or whether they reflect pre-existing structures is a pervasive feature of Lakoff/Johnson’s approach, which can in part be traced to their refusal to explicate the concept *structure* in the first place.”¹⁴¹

A similar vacillation subtends another circularity in L&J’s account of the role of experience in conceptual metaphor.¹⁴² Conceptual metaphors are “grounded in systematic correlations within our experience,” e.g. those between ARGUMENT and WAR.¹⁴³ At the same time, “[u]nderstanding a conversation as being an argument involves being able to superimpose the multidimensional structure of part of the concept WAR upon the corresponding structure CONVERSATION.” Thus, our having the concept ARGUMENT at all is dependent on the ARGUMENT IS WAR metaphor, which is itself based on experiential correlations between the two domains. But ARGUMENT

¹⁴¹ Haser, *Metaphor, Metonymy, and Experientialist Philosophy*, 167.

¹⁴² See Ibid., 148–9, 157.

¹⁴³ Lakoff and Johnson, *Metaphors We Live by*, 190, 61. For their analysis of these structural correlations, see Ibid., 79–81. This list of the literal features of arguments that correspond to features of WAR (e.g. “You have an opinion that matters to you. (*having a position*)”; “The difference of opinion becomes a conflict of opinions. (*conflict*)”) inadvertently demonstrates that ARGUMENT can be conceptually fleshed out on its own terms, is no less “clearly delineated” than WAR, and thus not dependent on it for metaphorical structuring. L&J would likely respond to this claim by arguing that “[w]hat gives coherence to this list of things that make a conversation into an argument is that they correspond to elements of the concept WAR,” (Ibid., 80) and that “not only our conception of an argument but the way we carry it out is grounded in our knowledge and experience of physical combat.” (Ibid., 63) As argued above, however, absent non-linguistic evidence this claim is just a claim. Strictly speaking, all their comparative list shows is a possible thematic correlation between ARGUMENT and WAR. An equally, or, for Haser, more, plausible conclusion is that “[a]rgument and war share a common structure *independently* of metaphorical transfer.” (Haser, *Metaphor, Metonymy, and Experientialist Philosophy*, 149.)

does not exist until the metaphor creates it. Haser, again, incisively recapitulates: “Lakoff/Johnson cannot have it both ways: Either the ARGUMENT IS WAR metaphor is a presupposition of being able to ‘understand a conversation as being an argument’...or the metaphor ARGUMENT IS WAR is based on our experience of arguments as warlike.”¹⁴⁴

This contradiction is seen even more clearly in the orientational metaphor MORE IS UP, which supposedly enables us to grasp and conceptualize some aspect of the “less clearly delineated” MORE.¹⁴⁵ The experiential basis of the metaphor (i.e. what “IS” represents) is “the cooccurrence of two types of experiences: adding more of a substance and seeing the level of the substance rise.”¹⁴⁶ Yet without an antecedent notion of MORE, this cooccurrence could never have been noticed. In this way, namely *petitio principii*, the conceptual metaphor presupposes what it is meant to explain.

L&J might reasonably retort: MORE, being less clearly delineated, can be *experienced* directly, but not *conceptualized* on its own terms. It is the *experience* of MORE, correlated with the experienced *and* conceptualized UP, that leads to MORE IS UP, which adds conceptual flesh to the skeletal MORE. If we accept this account, the question then becomes: why is MORE conceptually bereft and how do L&J know that it is? For the former question, there is the claim that some domains of experience are just “less clearly delineated” (e.g. emotions)—though why this should be the case for MORE is unclear. For the latter, presumably L&J would argue that the very existence of the conceptual metaphor MORE IS UP testifies to our need to have created it, in other

¹⁴⁴ Haser, *Metaphor, Metonymy, and Experientialist Philosophy*, 149.

¹⁴⁵ See *Ibid.*, 155–57.

¹⁴⁶ Lakoff and Johnson, *Metaphors We Live by*, 155. E.g. when adding more liquid to a glass.

words, to the conceptual impoverishment of MORE. Relatedly, they might argue that the metaphorical asymmetry (i.e. that UP tends to be the source and MORE the target of conceptual metaphors; or, using another example, that we speak of a theory's *construction* but not of a building's *hypothesis*) points to MORE's antecedent conceptual dearth. Metaphorical asymmetry, however, need not lead to the conclusions of conceptual metaphor theory; alternative approaches, including Haser's and Glucksberg's, offer compelling accounts of that phenomenon.¹⁴⁷ More importantly, L&J would still need to explain how and why a target domain could have inherent image-schematic structure (as the invariance principle has it) but still need to borrow the linguistic-inferential patterns that arise from the very same image schemas in the source domain. It should already have access to all the conceptual entailments of its own image schemas. L&J's insufficient and inconsistent explication of the concepts of "structure," "experience," and "conceptualization" only aggravates these ambiguities and aporias.

Absent a plausible and detailed account of cross-domain structuring, the problems of meaning and the interpretation of specific metaphors remain unsolved. That metaphorical expressions are open to different interpretations is often obscured by the sedimentation of meanings within a linguistic community.¹⁴⁸ L&J's nearly exclusive use of conventional expressions, which many analytic philosophers do not even consider to be true metaphors on account of their "frozen" meanings,¹⁴⁹ not only

¹⁴⁷ It is beyond the scope of this dissertation to explicate these positions, but see Haser, *Metaphor, Metonymy, and Experientialist Philosophy*, ch. 8 and Sam Glucksberg and Boaz Keysar, "Understanding Metaphorical Comparisons: Beyond Similarity," and Murphy, 197-8.

¹⁴⁸ This was shown to be the case for idioms by Keysar and Bly's experiment, glossed above

¹⁴⁹ Haser, *Metaphor, Metonymy, and Experientialist Philosophy*, 154.

conceals this fact but allows them to evade the issue of interpretation. In other words, these expressions' crystallized meanings obfuscate the complex cognitive maneuvers theoretically required, on L&J's account, to get from utterance to meaning. Namely, a phrase must first be recognized as metaphorical and its elements not only as members of superordinate categories, but the *appropriate* ones (e.g. "that we're just spinning our wheels"¹⁵⁰ is, first, not to be taken literally, and second, causes the listener/reader to access LOVE and JOURNEY to the exclusion of other possible domains).¹⁵¹ L&J provide no account of these processes (nor mention the need for one), a major shortcoming for a *cognitive semantic* theory that claims to have shed new light on classic problems of meaning, understanding, and truth.¹⁵² Though it would be difficult, if not impossible, to show that such maneuvers are cognitively unfeasible, it seems clear that, compared to, say, Glucksberg's class-inclusion model, they are cognitively cumbersome and inefficient.

Even granting this automatic, category-abstracting ability, the problem of interpretation persists, for the correlation of two domains does not *per se* entail a particular construal of their relationship, of *how* A IS B. Haser concludes similarly: "The formula 'understanding X in terms of Y' is empty: What we need is an interpretation of the metaphor—a specification of how this understanding of X in terms of Y is itself to be *understood*."¹⁵³ That understanding will depend on which features of the source domain are selected to participate in the mapping (i.e. which of the many viable

¹⁵⁰ Lakoff and Johnson, *Metaphors We Live by*, 45.

¹⁵¹ See Leezenberg, *Contexts of Metaphor*, 139–40.

¹⁵² Lakoff and Johnson, *Metaphors We Live By*, chs. 19–30; Leezenberg, *Contexts of Metaphor*, 139.

¹⁵³ Haser, *Metaphor, Metonymy, and Experientialist Philosophy*, 153.

aspects and associations, indeed *versions*, of JOURNEY, WAR, and BUILDING, for example, are used) and how metaphorical analogs in the target domain are generated and defined (i.e. what *on the rocks*, *attack*, *foundation*, etc. will mean in the domains of, say, LOVE, ARGUMENT, and THEORY respectively). L&J appear to recognize some of these issues but do not truly address them. As for the latter, they maintain that “[t]he definition of subconcepts, like BUDGETING TIME and ATTACKING A CLAIM, should fall out as consequences of defining the more general concepts (TIME, ARGUMENT etc.) in metaphorical terms.”¹⁵⁴ But this only defers the problem to the former concern, which implicates not only the various problems of structure broached above, but also the issue of “used” and “unused parts” of the source domain (mentioned in the overview of *MWLB*). Typical of their expository method, L&J provide a description of a purported phenomenon without an explanation of its origin or mechanism. That only some aspects of the source domain are employed in a metaphorical transfer is obvious. What is required is an explanation of how this comes to be. Absent that, L&J end up assuming what they should be proving (e.g. their “IS” appears to presume what it should explain) and smuggling conclusions into their premises.¹⁵⁵

¹⁵⁴ Lakoff and Johnson, *Metaphors We Live by*, 117.

¹⁵⁵ This issue speaks to the larger epistemological problem, first identified by Wittgenstein, with conceptualist approaches that, like L&J’s, treat concepts as mental images or states-of-mind, and “preconceptual structure” (or “direct understanding”) as meaningful largely on the basis of the content of corresponding mental images. In short, Wittgenstein showed that mental images are not a self-interpreting idiom and thus cannot explain language use. It is the ability to employ, not merely possess, a mental representation that constitutes understanding. Ludwig Wittgenstein, *Philosophical Investigations: The German Text, with a Revised English Translation*, trans. G. E. M. Anscombe (Oxford, UK; Malden, MA: Blackwell, 1997), §139ff. For incisive argumentation along these lines, see Leezenberg, *Contexts of Metaphor*, 263–267 and Haser, *Metaphor, Metonymy, and Experientialist Philosophy*, 124–142.

As mentioned earlier, it is the sedimentation of conventional expressions' meanings that allow these fundamental deficiencies to remain somewhat hidden. Because we already know the meanings (and find it hard to imagine other possible meanings¹⁵⁶), we overlook, or fill in ourselves, the various gaps required for an explanatory theory, thereby lending L&J's story the illusion of illumination.

Focusing on the structuring, experiential grounding, and interpretation of cross-domain mappings, I have argued that L&J's exposition of these central concepts is vague, inconsistent, often based on circular reasoning or *petitio principii*, and thus often resulting in aporia or incoherence. Regarding structure, the confusion over whether conceptual metaphors create or reflect structure permeates their account and the conflation of these views results in circularity. Similarly, regarding experience, the ambiguity over whether experience grounds or is grounded by cross-domain mappings renders their argument indefensible. Both these problems were seen to undermine their approach to meaning and interpretation, which, by focusing on conventional expressions, fails to deal meaningfully with essential cognitive semantic questions and masks basic gaps in their theory.

In chapter 2 I summarize and critique the image schema theory and offer a phenomenological assessment.

¹⁵⁶ See Keysar and Bly, "Swimming against the Current."

CHAPTER 2

Mistaking Concept for Process: Image Schema Theory

I am only against reading concepts back as if they were “the basis of” the process that gives rise to them. That falsifies and hides the process.

- Eugene Gendlin¹

If conceptual metaphor theory (CMT) outlines the pervasively metaphorical, experientially grounded structuring of our conceptual system, image schema theory (IST) elaborates and codifies the predominant agents of that structure and their bodily basis. Though certain proto-image schemas figure prominently in *Metaphors We Live By* as source domains (e.g. CONTAINER), it is not until Johnson’s and Lakoff’s 1987 publications that they are systematically articulated as such, promoted from prevalent source domains to fundamental cognitive apparatus.² Given that extended treatment, especially by Johnson in *The Body in the Mind (TBM)*, a detailed evaluation is warranted.

¹ Eugene Gendlin, “Reply to Johnson,” in *Language Beyond Postmodernism: Saying and Thinking in Gendlin’s Philosophy*, ed. David Levin (Northwestern University Press, 1997), 169.

² George Lakoff and Mark Johnson, *Metaphors We Live By* (Chicago: University of Chicago Press, 1980); Mark Johnson, *The Body in the Mind: The Bodily Basis of Meaning, Imagination, and Reason* (Chicago: University of Chicago Press, 1987); George Lakoff, *Women, Fire, and Dangerous Things* (Chicago: University of Chicago Press, 1987).

Part two of my critique of cognitive musicology proceeds in three stages: After summarizing image schema theory proper,³ I offer a two-pronged critique, the first general, comprising both original and previously leveled criticisms, and the second phenomenological.

*

As in *Metaphors We Live By* (*MWLB*), Lakoff and Johnson's opponent and target in their 1987 work is "Objectivism," the epistemological, ontological, and metaphysical paradigm that has allegedly dominated Western philosophy and culture for centuries. Against the latter's disembodied idealism, Lakoff and Johnson (L&J) pit their embodied "Experientialism," the former focusing on categorization and conceptualization and the latter on image schemas and their metaphorical elaborations.⁴

For Johnson, those two basic phenomena demonstrate the essential but heretofore neglected role of imagination, a capacity without which "nothing in the world could be meaningful."⁵ This resurrection and privileging of imagination—here referring not to nineteenth-century notions of unfettered creativity but to a neo-Kantian cognitive faculty that mediates between percept and concept—in turn compels reformulations of

³ I will focus my critique on Johnson's account, considered ground zero for image schema theory, with occasional mention of Lakoff's contributions. Whereas the latter's 1987 work is largely about categorization (image schemas are discussed only in Book II, case study 2), the former's is almost exclusively concerned with image schemas and their metaphorical elaborations.

⁴ For an overview of Objectivist and Experientialist tenets, see chapter 1.

⁵ Johnson, *The Body in the Mind*, ix.

such basic notions as reason, meaning, and truth. As the latter follow programmatically from Johnson's exposition of two central "imaginative structures of understanding" (i.e. image schemas and their metaphorical elaborations), I begin there.⁶

Johnson's foundational claim is that "human bodily movement, manipulation of objects, and perceptual interactions involve recurring patterns without which our experience would be chaotic and incomprehensible."⁷ These thereby embodied patterns, namely image schemas, not only order our experience preconceptually, but also, via metaphorical projection, structure our perception and conceptualization of more abstract realms of experience, as well as reasoning itself.⁸

Like "imagination," the term "schema" comes from Kant, though Johnson specifies his version in several ways. Crucially for his anti-Objectivist account, they are not propositional in the conventional sense (as defined by Johnson⁹), i.e. abstract, finitary, predicative, truth-conditional, symbolic representations. Though "some important structural features of any given schema" can be thus captured, their essentially operational and embodied nature resists a comprehensively propositional description.¹⁰ Johnson argues further that "propositional content is possible only by virtue of a complex web of nonpropositional schematic structures that emerge from our bodily

⁶ Ibid., xiv.

⁷ Ibid., xix.

⁸ As Lakoff put it, "they structure our perceptions and...their structure is made use of in reason." Lakoff, *Women, Fire, and Dangerous Things*, 440.

⁹ Johnson, *The Body in the Mind*, 3.

¹⁰ Ibid.

experience.”¹¹ It is this nonpropositional, embodied, preconceptual dimension of meaning that lies at the heart of his philosophy.

If image schemas are not propositional structures, neither are they “rich, concrete images or mental pictures.”¹² Following Kant’s notion of schema, Johnson asserts that they are rather “structures that organize our mental representations at a level more general and abstract than that at which we form particular mental images.”¹³ They thus “operate at a level of mental organization that falls between abstract propositional structures, on the one side, and particular concrete images, on the other,” and as such, make possible the other two cognitive faculties.¹⁴

Image schemas are gestalt structures, that is, “organized whole[s] within our experience and understanding that [manifest] a repeatable pattern or structure.”¹⁵ Though analyzable into parts, they are meaningful in perception and cognition as unities. As analog functions, they operate as “continuous structure[s] of an organizing activity” yet, despite that structure, remain “dynamic patterns rather than fixed and static images.”¹⁶ Though they are pragmatically represented in two-dimensional visual form, Johnson emphasizes that they are in fact three-dimensional, temporal, and kinesthetic.¹⁷

¹¹ Ibid., 5.

¹² Ibid., 23.

¹³ Ibid., 23–24.

¹⁴ Ibid., 29.

¹⁵ Ibid., 44.

¹⁶ Ibid., 29.

¹⁷ Ibid., 23., though he admits that “our visual schemata seem to predominate.” (Ibid., 25)

Johnson's discussion of the CONTAINER schema exemplifies many of these features:

Our encounter with containment and boundedness is one of the most pervasive features of our bodily experience. We are intimately aware of our bodies as three-dimensional containers into which we put certain things (food, water, air) and out of which other things emerge (food and water wastes, air, blood, etc.). From the beginning, we experience constant physical containment in our surroundings (those things that envelop us). We move in and out of rooms, clothes, vehicles, and numerous kinds of bounded spaces. We manipulate objects, placing them in containers (cups, boxes, cans, bags, etc.). In each of these cases there are repeatable spatial and temporal organizations. In other words, there are typical schemata for physical containment.¹⁸

Whereas propositional meaning involves logical inferences, image-schematic structure carries "entailments," several of which Johnson enumerates for CONTAINER:

(i) The experience of containment typically involves protection from, or resistance to, external forces. When eyeglasses are *in* a case, they are protected against forceful impacts. (ii) Containment also limits and restricts forces within the container. When I am *in* a room or *in* a jacket, I am restrained in my forceful movements....(v) Finally, we experience transitivity of containment. If B is *in* A, then whatever is *in* B is also *in* A. If I am *in* bed, and my bed is *in* my room, then I am *in* my room.¹⁹

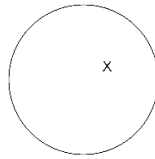
Though entailments are unavoidably expressed in propositional terms, Johnson cautions, "we must not mistake our mode of description for the things described,"

¹⁸ Ibid., 21.

¹⁹ Ibid., 22. Emphasis is original unless otherwise noted.

which are argued to be preconceptual and thus nonpropositional features of embodiment.²⁰

The CONTAINER schema is represented as follows:



CONTAINMENT²¹

Figure 2.1 Johnson's CONTAINMENT schema

Following Lindner, Johnson posits three related schemas to cover "in-out orientation."²²

²⁰ Ibid., 4.

²¹ Ibid., 23.

²² Ibid., 32. See Susan Lindner, "A Lexico-Semantic Analysis of English Verb Particle Constructions with Out and Up" (PhD diss., University of California, San Diego, 1981). Lindner analyzed some 600 "out" verb-particle constructions (VPC, e.g. *take out*) and 1200 "up" VPC's (e.g. *pick up*). For the former, she proposed a systematically unified meaning for all usages covered by the three schemas above plus their various sub-schemas. See chapter 1 for a discussion of her work.

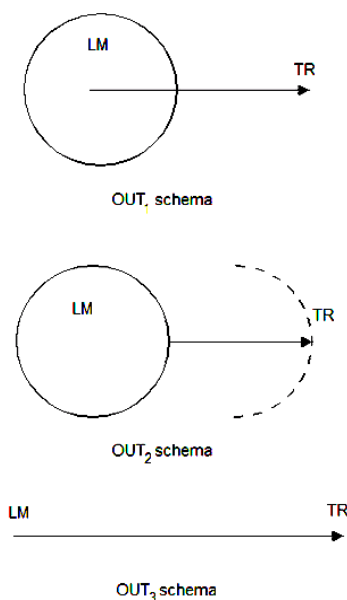


Figure 2.2 Johnson's OUT schemata (following Linder)

As figure to ground, the “trajector” (TR) in these schemas moves in relation to the “landmark” (LM). Johnson concerns himself with the first, considered the prototypical OUT schema, in which a trajector exits a container.²³ This dynamic pattern, pervasive in our spatial grasp of the world, shows up in activities (and sentences) like “John went out of the room” and “He squeezed out some toothpaste.”²⁴ Figurative elaboration and extension of the schema allows for the comprehension and conceptualization of numerous non-spatial, typically more abstract phenomena. In

²³ Linder labels the first “Prototypical OUT.” The second, “Reflexive OUT” describes an expansion of a single object (e.g. “roll out the carpet,” “grow out your hair”), and the third, “OUT-3,” profiles “movement away from a point designated as origin, center, or source” (e.g. “they started out for Alaska”). Lindner, “A Lexico-Semantic Analysis of English Verb Particle Constructions with Out and Up,” 137.

²⁴ Johnson, *The Body in the Mind*, 33. Johnson suggests that the projection of in-out orientation onto inanimate objects (as in the second sentence) “is already a first move beyond the prototypical case of *my* bodily movement” (Ibid., 34) (as in the first sentence), though he asserts that “nothing crucial rests on this claim.” (Ibid., 33)

“Tell me your story again, but leave out the minor details,” an event (story) is conceived as the landmark and an abstract entity (details) as the trajector. In other cases, an agreement or obligation is conceptualized as a container (“Don’t you dare back out of our agreement”), thus the sense of being physically *bound* by container is extended to cover senses of being *bound* by legal, moral, or other obligations.²⁵ Indeed, for Johnson, “this fact is a consequence of the schema for containment.”²⁶ Another kind of projection treats the contents of the container as hidden or unnoticed and the out movement as a “bringing into prominence or making public” (e.g. “Honda just put out its 1986 models,” “When you wear blue, it really brings out your eyes”). These examples highlight the inherently perspectival nature of orientational image schemas: whereas in these instances, the “viewpoint” is outside the container, the viewer perceiving what emerges therefrom, in examples like “He bowed out of our agreement,” the implied perspective is from within the container of the agreement.²⁷ Importantly for Johnson, this is a specifically nonpropositional facet of image-schematic employment: “[G]rasping the relevant perspective is not usually a matter of entertaining a proposition, such as ‘I’m viewing the container from the outside’; rather it is simply a point of view that we take up, *because it is part of the structural relations of the relevant schema.*”²⁸

²⁵ Ibid., 35.

²⁶ Ibid.

²⁷ Ibid., 36.

²⁸ Ibid. Incidentally, this aspect is perhaps an example of how the two-dimensional visual diagram of a schema is inevitably “misleading,” (23) as the CONTAINER diagram’s perspective, if it implies any, is either avian or divine.

As also argued in *MWLB*, conceptual metaphors do not *reflect* preexisting similarities between domains of experience, but actually *create* structure in the target domain. (It is this “creative” function of *image* schemas that Johnson considers “imaginative,” hence a theory of imagination.) As “projection” implies, the structure of the source domain is “metaphorically imposed” on the target domain, determining not only how we conceive of and talk about the latter, but our very experience of it.²⁹ For instance, the projection of the body-derived BALANCE schema onto our psychic and emotional makeup—resulting in conceptual metaphors like “*balanced* personality,” “*under control* emotions,” and “problems *weighing* on our minds,” etc.—dictates the “*structure of our experience* of emotions.” Thus, “[w]hen I am emotionally worked-up, I feel myself to be out of balance.”³⁰ When emotions *overflow* or *erupt*, one attempts to restore equilibrium by *releasing* or *suppressing* them. Conversely, when feeling *drained* or *exhausted*, one might try to *recharge* or *pump oneself up* in order to regain balance.³¹

These sorts of “inferences,” argues Johnson, arise directly from the internal structure of the grounding image schema, which, though bare and malleable, is sufficient to yield entailments (as seen above with CONTAINER). In the previous case, the EQUILIBRIUM schema (a variation on the prototypical BALANCE schema, the TWIN-PAN BALANCE, see figure 2.3 below) entails that equilibrium rests on the “symmetrical (or proportional) arrangement” of internal and external forces.³² This in turn generates the emotional/psychological inferences above, as well as parallel inferences in the

²⁹ Ibid., 98, 89. Johnson thus calls them “experientially formative.” (35)

³⁰ Ibid., 89.

³¹ Ibid., 88.

³² Ibid., 85. Note the embedded CONTAINER.

domain of systems, from mousetraps to entire philosophies (i.e. “there must exist a certain dynamic equilibrium, a proper balance of forces, if the system is to function properly”).³³ Similarly, the TWIN-PAN BALANCE schema experientially and inferentially (as well as conceptually/verbally) organizes our notion of legal/moral balance (we assess the *weight* of opposing arguments, aim to realign the *scales* of justice) and even the abstract idea of mathematical equality (where numerical values have *weight* and we *balance* equations).³⁴ Furthermore, BALANCE undergirds the logical properties of transitivity (“A balances B if and only if B balances A”), transitivity (“If A balances B, and B balances C, then A balances C”), and reflexivity (“A balance A”), and thus governs basic modes of abstract reasoning.³⁵

³³ Ibid., 87.

³⁴ Ibid., 90.

³⁵ Ibid., 97. In the domain of abstract reasoning, Johnson postulates the image-schematic underpinning of formal reasoning in terms of (motion along) a PATH schema – “we understand ourselves as starting at some point (a proposition or set of premises), from which we proceed in a series of steps to a conclusion (a goal, or stopping point) – and logical negation in terms of a CONTAINER schema – e.g. the “law of the excluded middle” (i.e. a proposition is either true (P), or its negation is (~P)) follows from our conceiving of categories as containers, for which any entity is either inside or outside. (Ibid., 38-39) Similarly, he suggests that a FORCE schema lies at the root of the laws of logical necessity/possibility (i.e. “if P is logically necessary, then P is true”), meaning “[i]f the force of logic operates to move you to a certain “place,” then you wind up in that place.”(Ibid., 64) He uses the same schema (or rather the family of FORCE schemas) to ground our understanding of modal verbs (following Sweetser) and speech act structure (Austin, Searle). See Ibid., 48-61.

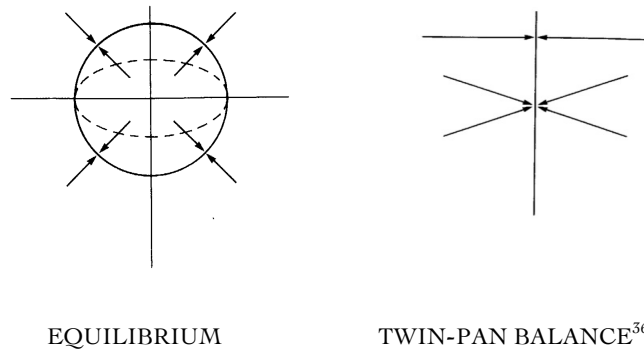


Figure 2.3 Johnson's EQUILIBRIUM and TWIN-PAN BALANCE schemata

As image-schematic projections create possibilities of meaning, they equally limit them—or, rather, these two functions are two sides of the same coin:

To say that image schemata “constrain” our meaning and understanding and that metaphorical systems “constrain” our reasoning is to say that they establish a range of possible patterns of understanding and reasoning. They are like channels in which something can move with a certain limited, relative freedom. Some movements (inferences) are not possible at all. They are ruled out by the image schemata and metaphors.³⁷

Inasmuch as constraints, or prohibited inferences, are the inverse, a kind of photographic negative, of positive inferences, we have already encountered them on a basic level. Johnson demonstrates their more complex workings in an analysis of the pioneering work of Hans Selye, the founder of modern stress theory. In his research and clinical experience, Selye noticed a cluster of nonspecific, pervasive symptoms

³⁶ Ibid., 86–87.

³⁷ Ibid., 137.

(including intestinal distress, joint pains, enlarged spleen or liver, etc.) that seemingly acted as a “syndrome of response to injury as such.”³⁸ Selye was initially confounded by these observations since they did not square with the established model of disease, which Johnson argues was governed by the BODY AS MACHINE metaphor. Because of the latter’s entailments (“The body consists of distinct, though interconnected parts,” “Breakdown occurs at specific points or junctures in the mechanism,” “Treatment directs itself to specific faulty units or connections,” etc.³⁹), Selye was unable to grasp the meaning of his findings, essentially constrained by the reigning metaphor. Specifically, there was no place for nonspecific symptoms in that diagnostic paradigm. It was not until he embraced a novel understanding of the BODY AS HOMESTATIC ORGANISM, in which the body’s goal is the maintenance of balance among its organically connected systems, that Selye came to his (and the still current) conceptualization of “stress” as a “general adaptive response to any stressor.”⁴⁰ For Johnson, these metaphors are not interpretive overlays, but are rather *constitutive* of experience and conceptualization.

In conceptual metaphors, the pairing of source domains with the target domains they structure is “natural” in that they are based on “experiential correlation.”⁴¹ To take Johnson’s classic example, our understanding of MORE in terms of UP or, more generally, QUANTITY in terms of VERTICALITY (e.g. “The crime rate keeps *rising*,”

³⁸ Hans Selye, *The Stress of Life* (McGraw-Hill, 1956), 25–26., quoted in Johnson, *The Body in the Mind*, 129.

³⁹ Johnson, *The Body in the Mind*, 130.

⁴⁰ *Ibid.*, 132.

⁴¹ *Ibid.*, 116–117.

“That stock has *fallen* again,” “Turn *down* the heat,” etc.) arises from basic experiences like adding more of a substance to a pile and seeing its level rise.⁴² The metaphor MORE IS UP “is based on, or is an instance of...the SCALE schema,” (see figure 2.4) which organizes both the qualitative and quantitative aspects of our experience:

[w]e can view our world as a massive expanse of quantitative amount and qualitative degree or intensity. Our world is experienced partly in terms of *more*, *less*, and *the same*. We can have more, less, or the same *number* of objects, *amount* of substance, *degree* of force, or *intensity* of sensation. This “more” or “less” aspect of human experience is the basis of the SCALE schema.



Figure 2.4 Johnson’s SCALE schema

This nearly ubiquitous schema is “figuratively extended to cover abstract entities of every sort (numbers, properties, relations, geometric structures).”

Similarly, grounding the pervasive PURPOSES ARE PHYSICAL GOALS, by which we understand and experience abstract goals as spatial ones (e.g. “I’ve got *quite a way to go* before I get my Ph.D,” “Jane was *sidetracked* in her search for self-understanding,”

⁴² Ibid., 121, xv.

⁴³ Ibid., 123.

“Follow me—this is *the path* to genuine happiness”⁴⁴), is a primal experiential correlation of the two domains:

From the time we can first crawl, we regularly have as an intention getting to a particular place, whether for its own sake, or as a subgoal that makes some other activity possible. There may well be no intention satisfied more often than physical motion to a particular desired location. In such cases, we have a *purpose*—being in that location—that is satisfied by moving our bodies from a starting point A, through an intermediate sequence of spatial locations, to the end point B.⁴⁵

Like MORE IS UP, PURPOSES ARE PHYSICAL GOALS is based on an underlying schema, here the PATH schema (in conjunction with the metaphor STATES ARE LOCATIONS, which enables the mapping of abstract states onto physical locations) (figure 2.5). To say that an experiential correlation grounds a metaphor is to say that “the metaphorical mapping is isomorphic with the experiential pairing,”⁴⁶ yielding the following mappings:

Starting location onto initial state.

Goal (final location) onto final state.

Motion along path onto intermediate actions.⁴⁷

⁴⁴ Ibid., 115.

⁴⁵ Ibid.

⁴⁶ Ibid., 116.

⁴⁷ Ibid., 114.

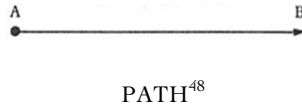


Figure 2.5 Johnson's PATH schema

As intimated above, Johnson's exposition of these essentially "imaginative" phenomena (following a revised, embodied Kantian notion of a cognitive faculty that mediates between percept and concept, or mental representation and logical structure⁴⁹) leads to a new, anti-Objectivist approach to understanding, meaning, and rationality, not to mention experience and truth. Understanding is thus not a largely propositional reflection on experience but rather "*the way we 'have a world,' the way we experience our world as a comprehensible reality....*In short, our understanding *is* our mode of 'being in the world.'"⁵⁰ As such it "is a result of the massive complex of our culture, language, history, and bodily mechanisms that blend to make our world what it is. *Image schemata and their metaphorical projections are primary patterns of this 'blending.'*"⁵¹

In place of an Objectivist theory of meaning which treats it "as a relation between sentences and objective (mind-independent) reality," Johnson proposes a non-Objectivist "semantics of understanding" in which "meaning is always a matter of human understanding." Simply put, "[a] theory of meaning is a theory of

⁴⁸ Ibid.

⁴⁹ The specifics of Johnson's reading and modification of Kant is not crucial for my critique, but for details see Ibid., 147–72.

⁵⁰ Ibid., 102.

⁵¹ Ibid., 104.

understanding,” which involves, of course, image schemas, their metaphorical projections, as well as propositions.⁵²

Bridging, or eliminating, the gap between the purely material and the purely rational (Kantian Idealism), or, similarly, between body and mind (Objectivism), leads Johnson to a view of experience and understanding based on an ongoing, mutually transformative, pragmatically coupled “organism-environment interaction.” That symbiotic evolution has yielded not only image schemas (i.e. the recurring patterns of that interaction), but also the “basic level” of experience and categorization that is the subject of Lakoff’s contemporaneous publication:

Such a level of organization permits us to function well most of the time. It is the level defined by gestalt perception of overall shape, by our capacities for motor movement in interaction with the object, and by our ability to form rich images of the object. It is thus the level of organization that permits us to characterize relatively accurately those discontinuities in nature that matter most for our everyday functioning.⁵³

CHAIR, for instance, is a basic level object. It is that category level, rather than the superordinate FURNITURE or the subordinate ROCKING CHAIR that is experientially basic.⁵⁴

Johnson summarizes the thrust of his (and Lakoff’s) view thusly:

⁵² Ibid., 174.

⁵³ Ibid., 208. For more on the “basic level” and the related “prototype theory” (Rosch), see Lakoff, *Women, Fire, and Dangerous Things*.

⁵⁴ Johnson, *The Body in the Mind*, 208.

[w]e have conceptual systems that are grounded in two ways—in basic-level and image-schematic understanding—and are extended imaginatively by category formation and by metaphorical and metonymic projections...*Understanding is an event*—it is not merely a body of beliefs (though it includes our beliefs). It is the means by which we have a *shared, relatively intelligible world*. The basic epistemological finding of this ‘experientialist’ (cognitive semantics) approach is that knowledge must be understood in terms of structures of embodied human understanding, as an interaction of a human organism with its environment.⁵⁵

*

While much compels in Johnson’s philosophy—the grounding of experience and understanding in embodiment, the privileging of nonpropositional knowledge, the rapprochement of mind and body in an organism-environment coupling—there is much that is wanting, confused, and problematic. My critique will focus on three main features of his system: the alleged indispensability and emergence of image schemas, the grounding and dynamics of metaphorical projection, and the evidence for image schemas and their metaphorical elaborations. In brief, I will argue that Johnson assumes rather than proves that image schemas are necessary for our successful functioning in the world, that their putative ontogenesis is improbable if not illogical, that “experiential correlation” as the basis of metaphorical projections is ultimately incoherent, and that neither the psychological evidence he marshals for image schemas nor the analyses he provides substantiate their existence.

⁵⁵ Ibid., 209.

As a result of these and other methodological, empirical, and philosophical issues, I contend that image schemas are not the organically emergent, nonpropositional structures Johnson claims, but rather constitute a conceptual retrofitting of embodied experience that ultimately obscures rather than illuminates the complexity of that phenomenon. Consequently, Johnson's attempt to "put the body back into the mind," I will argue, ends up instead smuggling the mind back into embodiment.⁵⁶ To build towards this more global, essentially phenomenological claim, I begin with criticisms of various details of Johnson's account.

The very definition of image schemas consists of a paradox. On the one hand, they are the structures "by means of which our experiences manifests discernible order."⁵⁷ They, in fact, "[define] form itself."⁵⁸ On the other hand, as Johnson repeatedly asserts, they "emerge from our bodily experience,"⁵⁹ they have "embodied origins."⁶⁰ They are thus prerequisite for meaningful experience yet also generated, indeed abstracted, therefrom.⁶¹ It is unclear, and left unexplained, how image schemas could both ground and be grounded by the same experiences. As Timothy Clausner, a proponent of IST, puts it, they cannot be "*both* presupposed and acquired, and *both*

⁵⁶ Ibid., xxxvi.

⁵⁷ Johnson, *The Body in the Mind*, xix.

⁵⁸ Ibid., 206.

⁵⁹ Johnson, *The Body in the Mind*, 29. see also xix, 21.

⁶⁰ Johnson, *The Body in the Mind*, xv.

⁶¹ e.g. "the verticality schema is the *abstract* structure of these verticality experiences, images, and perceptions." Ibid., xiv. Emphasis added.

basic and derived.”⁶² This tension, perhaps outright circularity, is apparent even within single iterations of Johnson’s thesis, such as when he speaks of “patterns of meaningful experience that give rise to image-schematic structures.”⁶³ By his own definition, it is only by virtue of image-schematic structures that meaningful experience, let alone patterns of them, is possible. Clearly those experiences, on pain of circularity, cannot in turn generate image-schematic structure.

Pace Clausner, who believes the investigation of this paradox can lead to a refinement of IST, I will argue in the phenomenological critique below that further scrutiny reveals only deeper confusions, even contradictions, attending the purported ontogenesis and function of image schemas.

However they emerge, image schemas are asserted to be cognitively/experientially necessary. Indeed, the argument for their existence partially hinges on this indispensability, as Johnson repeatedly asserts:

If we are to experience our world as a connected and unified place that we can make sense of, then there must be repeatable pattern and structure in our experiences. Image schemata are those *recurring structures of, or in, our perceptual interactions, bodily experiences, and cognitive operations*.⁶⁴

⁶² Timothy C. Clausner, “Image Schema Paradoxes: Implications for Cognitive Semantics,” in *From Perception to Meaning: Image Schemas in Cognitive Linguistics*, ed. Beate Hampe and Joseph E. Grady (Berlin ; New York: Mouton de Gruyter, 2005), 107.

⁶³ *Ibid.*, 32. Clausner presents this and another paradox attending image schema theory in the spirit of promoting deeper understanding. He does not (though it is not his aim to) provide a solution, and as of yet none appears to have been suggested in the literature.

⁶⁴ Johnson, *The Body in the Mind*, 79.

Without them [i.e. image schemata] our experience would be an undifferentiated mush.⁶⁵

Without links [i.e. LINK], we could neither be nor be human.⁶⁶

The import of this ontological and epistemological claim should not be underestimated. In short, image schemas are what stand between us and sensorial *tohu-bohu*, what wrangle the sensory chaos into ordered, structured, and therefore meaningful phenomena—in short, what we call “experience.”

Johnson provides neither evidence nor argument to support this oft-repeated, foundational premise. His initial promise to “[show] that human bodily movement, manipulation of objects, and perceptual interactions involve recurring patterns *without which our experience would be chaotic and incomprehensible*”⁶⁷ is not only left unfulfilled, but simply not addressed.

To be fair, perhaps his intention was not to prove this supposition a priori or directly, but, by demonstrating the utility and ubiquity of image schemas in experience, indirectly substantiate their cognitive indispensability. On the role of CONTAINER in our everyday activities, for example, Johnson writes:

Consider, for example only a few of the many *in-out* orientations that might occur in the first few minutes of an ordinary day. You wake up *out* of a deep sleep and peer *out* from beneath the covers *into* your room. You gradually emerge *out* of your stupor, pull yourself *out* from under the covers, climb *into* your robe, stretch *out* your limbs, and walk

⁶⁵ Ibid., 206.

⁶⁶ Ibid., 117.

⁶⁷ Johnson, *The Body in the Mind*, xix. [my emphasis]

in a daze *out* of the bedroom and *into* the bathroom. You look *in* the mirror and see your face staring *out* at you....Once you are more awake, you might even get lost *in* the newspaper, might enter *into* a conversation, which leads to your speaking *out* on some topic.⁶⁸

Our performance of these unnoticed in-out “orientational feats,” whether physical (“*into* the bathroom”) or abstract (“*into* a conversation”), not to mention innumerable others (up-down, near-far, etc.), “involves an exceedingly complex interaction with [our] environment in which [we] experience significant patterns and employ structured processes [i.e. the CONTAINER schema] that give rise to a coherent world of which [we] are able to make sense.”⁶⁹

Though Johnson does not admit of a difference between the physical and abstract here, it is useful to consider the above claim as it pertains to each domain. For physical in-out orientations (i.e. where an actual container is involved), the assertion implies that we would literally be unable to leave or enter a room as such without the CONTAINER schema to guide our way, or that we would find ourselves unable, say, to put cherries *into* our mouths and take *out* the pits.⁷⁰ (This is not meant as a caricature of his position, simply its logical converse.) This is a strange, seemingly overcomplicated and over-mediated picture of basic cognition and behavior. A crucial question, then, is whether there is good reason to accept this cornerstone assumption.⁷¹

⁶⁸ Ibid., 30–31.

⁶⁹ Ibid., 31.

⁷⁰ Indeed, a strict reading would seem to imply that even breathing (taking air *in* and breathing it *out*) is dependent on CONTAINER. Ibid., 21.

⁷¹ Here it is important to distinguish evidence for the psychological *reality* of image schemas (which Johnson offers in ch.5, and which I will take up below) and evidence (or arguments)

Or, put differently, must image schemas be posited to account for basic human functioning in the world? That is, is there a plausible account of basic human-environment negotiation that does not resort to such mediating structures? In the phenomenological critique below, I submit that just such an account is put forward by Merleau-Ponty (with important elaborations by Todes, Gibson, and Dreyfus) and that not only is it cognitively simpler, and thus preferable, but also far more loyal to the phenomena in question.

Accepting Johnson's account of non-physical "orientational feats" (i.e. where CONTAINER is imposed on an abstract entity) depends in turn on accepting CMT as fact. Implicit in his CONTAINER story is the claim that when we "walk *in* a daze" or "get lost *in* the newspaper," that orientational terminology evidences the underlying experiential/conceptual structuring of the relevant image schema. In part one, I offered many reasons to doubt L&J's account of conceptual metaphor, and further arguments will be presented below.

Thus, Johnson's narration of "orientational feats," or the other similar informal, linguistic analyses of image-schematic underpinnings of normal activities, cannot indirectly substantiate the claim of their psychological necessity. They are restatements, not proof, of IST and/or CMT.

for their psychological *necessity*, for which none is offered. Consequently, discrediting the latter claim, as I aim to do, does not necessarily disprove the former (though I also aim to do that separately). In other words, showing that image schemas are not necessary for an account of human functioning does not *ipso facto* disprove their existence, only undercuts the strongest motivation (i.e. indispensability) for proposing them. Thus even without existential necessity, Johnson could still maintain that they arise at a later stage (perhaps as an abstraction from certain patterns of human functioning, closer to Mandler's image schema theory) and have cognitive utility as grounds for metaphorical projection and abstract reasoning.

What is the actual evidence adduced to support their existence? Johnson lists six kinds, the first involving “image-schematic transformations”:

[E]xperiments show that we can perform operations on image schemata that are analogs of spatial operations. For example, we can rotate images through mental space to perform matching operations. We can superimpose one image schema upon another. We can transform schemata (such as “pulling away” from an aggregate of distinct objects until it becomes a single homogenous mass). In other words, there is a level of image schematic operations more abstract than, and not reducible to, the formation of rich images or mental pictures.⁷²

Even granting the validity of these findings, it is unclear how they are meant to corroborate image schemas. Apart from this very discussion, Johnson does not mention “image-schematic transformations” or “operations,” and fails even here to define them or elucidate their relationship to the general theory or particular schemas. Furthermore, it would seem antithetical to the very notion of image schemas as abstract, pre-conceptual patterns to be able to be consciously called to mind, as any other mental image, to be “performed on.”

Many of Johnson’s examples come from Lakoff, who defines “image-schema transformations” only slightly less vaguely, as “certain very natural relationships among image-schemas.”⁷³ Yet not one of the four examples he gives explicitly involves some interaction between image schemas, and two do not appear to involve any named

⁷² Johnson, *The Body in the Mind*, 104.

⁷³ Lakoff, *Women, Fire, and Dangerous Things*, 440.

image schema at all. Consider the “path focus \leftrightarrow end-point focus” and “multiplex \leftrightarrow mass” transformations:

It is a common experience to follow the path of a moving object until it comes to rest, and then to focus on where it is. This corresponds to the path focus and end-point focus transformation.

As one moves further away, a group of individuals at a certain point begins to be seen as a mass. Similarly, a sequence of points is seen as a continuous line when viewed from a distance.⁷⁴

The first presumably involves the PATH schema, though it is unclear how mentally focusing on its different aspects involves a “transformation.” The second is simply not explained in reference to any image schema mentioned by either author.

Putting these definitional and expositional inadequacies aside, the larger argument of L&J is essentially the following: these various mind’s eye exercises demonstrate that there exists a level of abstract mental imagining that mimics physical phenomena and thus is image-schematic. Two larger problems prevent this argument from approaching the level of evidence. First, as above, it would require far more explanation than L&J offer to conclude that the abilities tested in the various experiments mentioned—experiments which were not explicitly testing, or even aware of the notion of, image schemas⁷⁵—correspond meaningfully to image schemas proper. Second, the equation

⁷⁴ Ibid., 442.

⁷⁵ Johnson neglects to mention this important fact (which is pointed out in Raymond W. Gibbs and Herbert L. Colston, “The Cognitive Psychological Reality of Image Schemas and Their Transformations,” *Cognitive Linguistics* 6, no. 4 (1995): 347–78.) and even misleadingly speaks

of various mental acrobatics—some (like the two “transformations” above) not even formal experiments but armchair exercises suggested by L&J⁷⁶—with fundamental cognitive faculties is not only an unwarranted interpretive leap, but a kind of ontological argument (i.e. imaginability equals reality) that carries the same absurd consequences as those used to prove god’s existence.

A thorough evaluation of the experimental literature marshaled for IST and CMT in the last twenty-five years—the so-called “mountains of evidence”⁷⁷—far exceeds the scope of this project. There are, nonetheless, several general reasons to suspect that these “mountains” may in fact be molehills. First, a great deal of the evidence is linguistic or language-based (i.e. analyses of language *à la* L&J, experiments involving verbal responses, etc.), which is suspect on two counts, both discussed in chapter 1: evidential circularity (i.e. where language serves as “both the predictor...and the predicted data”⁷⁸)⁷⁹ and hindsight-bias (where intuition/rationalization of known

of these experiments as if they had explicitly tested for image schemas, and some authors (e.g. Anderson) as if they had drawn conclusions about image schemas, when in fact they are *his* interpretation of their findings. See Johnson, *The Body in the Mind*, 25–26. Of course this does not necessarily invalidate his interpretation, but it is at the very least curious that he misrepresents these experiments.

⁷⁶ Johnson describes the same transformations in a try-this-yourself-at-home manner: “Imagine a large sphere and a small cube. Increase the size of the cube until the sphere can fit inside it. Now reduce the size of the cube and put it within the sphere.” Johnson, *The Body in the Mind*, 26.

⁷⁷ Mark Johnson and George Lakoff, “Why Cognitive Linguistics Requires Embodied Realism,” *Cognitive Linguistics* 13, no. 3 (2002): 251. In the same they also refer to “evidence that fills the pages of our discipline to overflowing.” (Ibid., 261) This article, a response to Rakova’s critique (cited below), it must be noted, is an ad hominem attack (see ARGUMENT IS WAR) that focuses far more on belittling Rakova than responding substantively to her reasonable criticisms.

⁷⁸ Gregory L. Murphy, “On Metaphoric Representation,” *Cognition* 60, no. 2 (1996): 183.

⁷⁹ Ibid., 183–84; Matthew S. McGlone, “What Is the Explanatory Value of a Conceptual Metaphor?,” *Language & Communication* 27, no. 2 (April 2007): 114–15; Matthew S. McGlone,

meanings is (mis)taken for a cognitive processing account). Second, as argued above, some alleged “evidence” brought by L&J, like “image-schematic transformations,” is so vague and empirically shoddy as to not be worthy of the name. Third, much of the empirical work on metaphor comprehension supposedly supporting CMT has been rightly criticized and empirically rebutted by cognitive scientists (several examples of which were discussed in chapter 1⁸⁰) for both its unparsimonious conclusions and the mistaking of post-hoc rationalization for actual meaning construction, or as McGlone succinctly put it, metaphor “appreciation” for “comprehension.”⁸¹

As an example of the latter methodological error, among several others, in the context of image schema research, consider Gibbs et. al.’s seminal and oft-cited 1994 experiment, which “attempted to experimentally show that the different senses of the polysemous word *stand* are motivated by different image schemas that arise from our bodily experience of standing.”⁸² Significantly, the study is given pride of place in his

“Hyperbole, Homunculi, and Hindsight Bias: An Alternative Evaluation of Conceptual Metaphor Theory,” *Discourse Processes* 48, no. 8 (2011): 567–68.

⁸⁰ Sam Glucksberg, Boaz Keysar, and Matthew McGlone, “Metaphor Understanding and Accessing Conceptual Schema: Reply to Gibbs (1992),” *Psychological Review* 99, no. 3 (1992): 578–81; Boaz Keysar and Bridget Bly, “Swimming Against the Current: Do Idioms Reflect Conceptual Structure?,” *Journal of Pragmatics* 31, no. 12 (1999): 1559–1578; Boaz Keysar and Bridget Bly, “Intuitions of the Transparency of Idioms: Can One Keep a Secret by Spilling the Beans?,” *Journal of Memory and Language* 34, no. 1 (1995): 89–109; Sam Glucksberg, Mary Brown, and Matthew McGlone, “Conceptual Metaphors Are Not Automatically Accessed During Idiom Comprehension,” *Memory & Cognition* 21, no. 5 (1993): 711–719; Sam Glucksberg and Matthew McGlone, “When Love Is Not a Journey: What Metaphors Mean,” *Journal of Pragmatics* 31, no. 12 (1999): 1541–1558; Matthew McGlone, “Conceptual Metaphors and Figurative Language Interpretation: Food for Thought?,” *Journal of Memory and Language* 35 (1996): 544–565.

⁸¹ Matthew S. McGlone, “Hyperbole, Homunculi, and Hindsight Bias: An Alternative Evaluation of Conceptual Metaphor Theory,” *Discourse Processes* 48, no. 8 (2011): 565.

⁸² Gibbs Jr. and Colston, “The Cognitive Psychological Reality of Image Schemas and Their Transformations,” 352.

and Colston's 1995 summary of empirical research that substantiated the "cognitive psychological reality of image schemas and their transformations," and for good reason: it was, at the time, "the only empirical work in psychology that has explicitly set out to investigate the possible role of image schemas in perception, thought, or language use."⁸³

The first of the four experiments that comprised the study (each involving separate subjects) proceeded as follows:

As a first step toward understanding how image schemas partly motivate the meanings of the polysemous word *stand*, a preliminary experiment sought to determine which image schemas best reflect people's recurring bodily experiences of standing. A group of participants were guided through a brief set of bodily exercises to get them to consciously think about their own physical experience of standing. For instance, participants were asked to stand up, to move around, bend over, to crunch, and to stretch out on their tiptoes. Having people actually engage in these bodily experiences facilitates participants' intuitive understandings of how their experience of standing related to many different possible image schemas. After this brief standing exercise, participants then read brief descriptions of 12 different image schemas that might possibly have some relationship to the experience of physical standing (e.g., VERTICALITY, BALANCE, RESISTANCE, ENABLEMENT, CENTER-PERIPHERY, LINKAGE). Finally, the participants rated the degree of relatedness of each image schema to their own embodied experience of standing. The results of this first study showed that five image schemas are primary to people's bodily experiences of standing (i.e., BALANCE, VERTICALITY, CENTER-PERIPHERY, RESISTANCE, and LINKAGE).⁸⁴

⁸³ Ibid., 354.

⁸⁴ Raymond W. Gibbs Jr. et al., "Taking a Stand on the Meanings of Stand: Bodily Experience as Motivation for Polysemy," *Journal of Semantics* 11, no. 4 (1994): 231–51.

In the second experiment, participants grouped 35 usages of “stand” (e.g. “stand at attention,” “let the issue stand,” “stand the test of time”) into five groups by similarity of meaning. In the third experiment, participants were led through the standing exercises, read the descriptions of the five highest rated image schemas from experiment 1, and then prompted to “rate the degree of relatedness” between those image schemas and 32 usages of “stand.” Gibbs et. al. then correlated the findings from this experiment with those of the second, concluding as follows:

Statistical analyses showed that knowing the image schema profiles for different senses of *stand* allowed us to predict 79% of all the groupings of *stand* in Experiment 2. These data provide very strong support for the hypothesis that people's understandings of the meanings of *stand* are partly motivated by image schemas that arise from their bodily experiences of standing.⁸⁵

For a number of reasons, this flawed study proves nothing of the sort. The products of conscious reflection on the experience of standing⁸⁶ are crucially different from the preconceptual abstract patterns that might be subtending that activity. Tacit gestalts and (prompted) cogitations on experience are different in kind. Similarly, being read descriptions of an image schema—e.g. “Consider the notion of

⁸⁵ Gibbs Jr. and Colston, “The Cognitive Psychological Reality of Image Schemas and Their Transformations,” 353. The fourth experiment was a control study meant to eliminate the possibility that groupings of “stand” were determined by semantic context.

⁸⁶ “Participants in this study were guided through a brief set of bodily exercises *to get them consciously to think about* their own physical experience of standing.” [my emphasis] Gibbs Jr. et al., “Taking a Stand on the Meanings of Stand,” 235. Incidentally, the “experience of standing” arguably should not include moving around, bending over, crunching, etc, which would invoke all sorts of different image schemas unrelated to simply standing. Why these exercises were chosen is not discussed.

VERTICALITY. Verticality refers to the sense of an extension along an up-down orientation. As you stand there, do you feel a sense of verticality?"⁸⁷ —has as much to do with the actual image schema as a description of gastrointestinal enzymatic activity has do with actual digestion. A description of an image schema is not an image schema, and putting a "notion" in someone's head does not magically access the preconceptual cognitive structure that it is meant to reference. The equation of preconceptual cognitive structure with conscious reflection on what are, for all intents and purposes, *concepts* that bare the same name (even described to the subjects as "notions,") is as methodologically naïve as it is theoretically misconceived.

Yet this error is perfectly consistent with what I have argued throughout is one of the basic flaws of CMT and IST, namely the mistaking of post-hoc linguistic analyses for a *process* account of meaning. If Gibbs et. al.'s study is successful, it is precisely at confirming that some of L&J et al.'s *conceptual* categorizations reasonably correlate with some aspects of meaning when people are made to think about them in those categories (and made to think about standing and "verticality" while standing just before answering questions about usages of "stand"). But even if my argument were entirely wrong, and they did in fact access the image-schematic level of subjects' cognition, the authors' move from correlation to causation is still utterly unwarranted. That they can mostly predict semantic groupings of "stand" by "image schema profile" does not demonstrate that the latter "motivates" the former. That this is an *assumption* of the experiment, posing as a *finding*, is evident from Gibbs's own description of the

⁸⁷ Ibid., 237.

aim of the study, namely to understand “how,” not *if*, “image schemas partly motivate the meanings of the polysemous word *stand*.”

Gibbs et al.’s foundational study is a veritable synopsis of the various methodological and theoretical flaws that pervade CMT and IST: it takes conclusions as assumptions, it conflates (or at least fails to consider carefully the distinction between) the pre-conceptual and conceptual, it mistakes conceptual correlation with cognitive motivation, and post-hoc appreciation for meaning generation. If this was the evidential centerpiece for IST as of 1995, the body of evidence may not be as robust as claimed.

Even as recently as 2011, in his summary of the empirical research corroborating CMT, Gibbs conceded that, thirty years on, a number of fundamental questions remain unanswered:

First, does one initially access the complete conceptual metaphor (e.g., “Love relationships are journeys”) from memory and then apply it to infer the metaphoric meaning of an expression (e.g., “Our marriage is a roller-coaster ride from hell”)? Second, if the conceptual metaphor is accessed prior to interpretation of expression, does it come with a package of detailed meaning entailments or correspondences that are also inferred as part of one’s understanding of what the expression means?; or, must people compute source-to-target domain mappings online to determine which entailments of the conceptual metaphor are applied to the meaning of utterance? Finally, do conceptual metaphors arise as products of understanding and are, therefore, not necessary to create an initial understanding of a metaphorical expression?... There are, as of yet, no empirical studies that provide exact answers to these questions.⁸⁸

⁸⁸ Raymond W. Gibbs, “Evaluating Conceptual Metaphor Theory,” *Discourse Processes* 48, no. 8 (2011): 550. [emphasis added]

Johnson's second kind of evidence, the "systematicity of literal expression," is, in other words, the linguistic evidence for conceptual metaphor compiled in *MWLB*. For many reasons laid out in chapter 1, this is proof neither of image schemas nor their metaphorical elaborations.

The third kind of evidence is our ability to use and comprehend novel metaphorical expression. For example, a sentence like "His theories are Bauhaus in their pseudofunctional simplicity" is readily understandable, L&J argue, because it is a reasonable employment of the "unused" part of THEORIES ARE BUILDINGS (the "used" parts being those that are "typically projected onto the target domain," in this case a building's foundation and outer shell⁸⁹). First, if expressions based on the "used" part of conceptual metaphors fail to demonstrate their existence, then neither do those based on the "unused" parts. Second, their distinction between "used" and "unused" is unsubstantiated in the first place, based only on what they consider an "ordinary" usage.⁹⁰ As the "unused" part can structure the target domain, i.e. it acts as a conceptual metaphor, there is no functional difference between the two.

Johnson's fourth source of evidence, polysemy, is again a restatement of CMT. He argues that the multiple, related meanings for a term (e.g. "out," "up," etc.) can be explained only by underlying image schemas and their metaphorical extensions. I argued in part one that L&J's polysemic nets are cast too widely, that many usages fall outside a global explanation, and other theories of metaphor deal compellingly with the

⁸⁹ Johnson, *The Body in the Mind*, 106.

⁹⁰ Ibid.

phenomenon without resorting to image-schematic structures. Furthermore, a schematic subsumption (as in Lindner) of varied usages, even if plausible, proves only that it is possible as an interpretational/conceptual exercise, not that it is a mental reality.

The fifth type of evidence comes from a study of diachronic semantic change by Sweetser, who noted the “general tendency to borrow concepts and vocabulary from the more accessible physical and social world to refer to the less accessible worlds of reasoning, emotion, and conversational structure.”⁹¹ For instance, several Indo-European roots that originally referred to vision later came to include meanings related to understanding (e.g. “I *see* what you mean”). Liaising between these two domains is PHYSICAL TOUCHING/MANIPULATION, which many vision words etymologically intimate (e.g. “*behold*,” “*perceive*” (Lat. “seize”), “discern” (Lat. “separate”). For Johnson, these findings “suggest the existence of shared metaphorical systems (e.g. UNDERSTANDING IS SEEING) in our understanding that are tied up with our bodily experience.... *If* there is any intelligibility to this change, then we have good reasons to think that metaphorical projections in our experience are central to the whole process.”⁹²

Johnson’s embracing of Sweetser’s phylogenic account as confirmation of his ontogenic one points to a questionable conflation of the two in both *MWLB* and *TBM*. Cultural linguistic evolution is not the same as individual cognitive/linguistic

⁹¹ Eve Sweetser, “Semantic Structure and Semantic Change: A Cognitive Linguistic Study of Modality, Perception, Speech Acts, and Logical Relations” (University of California, Berkeley, 1984), 26. Quoted in Johnson, *The Body in the Mind*, 107.

⁹² Johnson, *The Body in the Mind*, 109.

development and there seems little reason, *prima facie*, to suppose that the latter recapitulates the former. The former, in fact, would seem to obviate the need for the latter. If, for example, UNDERSTANDING IS SEEING has become built into a language over time, so that many ‘understanding’ words are ‘seeing’ words, the young language acquirer need not recreate a possible metaphorical derivation of one from the other in order to comprehend them. She need only learn the meanings of the words, that is, how to use them appropriately. Her language instruction does not follow etymological or conceptual patterns. It is only upon later reflection—of the sort that L&J’s system is in reality based on, as I have argued—that such relationships could be uncovered. Conceptual polysemy appears to be irrelevant in the face of practical polysemy, a post-hoc interpretive overlay. Etymology is not ontogeny. At the very least, L&J would need to explain how the historical/cultural interacts with the personal/cognitive, which they have yet to do adequately.⁹³

Johnson’s final type of evidence involves “metaphorical constraints on inference.” If it can be demonstrated that people’s underlying metaphorical conceptions determine specific inferences they make when reasoning in that domain, then those conceptions are clearly not just verbal but conceptual phenomena. Johnson interprets a set of experiments by Gentner and Gentner on analogical reasoning as corroborating precisely this point. Subjects operating with one of the two most common

⁹³ The same issue was noted in chapter 1 regarding L&J’s discussion of ARGUMENT IS WAR. Conceding the experiential priority of ARGUMENT, they reason: “[e]ven if you have never fought a fistfight in your life, much less a war, but have been arguing from the time you began to talk, you still conceive of arguments, and execute them, according to the ARGUMENT IS WAR metaphor because the metaphor is built into the conceptual system of the culture in which you live.” (Lakoff and Johnson, *Metaphors We Live by*, 64.) See chapter 1 for a critique of this rationale.

metaphorical models of electricity (“fluid-flow” or “moving-crowd”) were asked to solve problems concerning battery and diffuser alignments. Subjects using the “fluid-flow” model did better on battery questions and “moving-crowd” modelers did better on diffuser questions, results that were predictably consistent with inferences from their respective models.⁹⁴ Johnson concludes as follows:

Someone who proposes a strict theory/practice separation might argue that these experiments show only an obvious fact—that humans use different models to apply their knowledge. But these are just cases of “application” of independently existing knowledge. I am suggesting the stronger thesis that such models *constitute* an individual’s understanding of a phenomenon and thereby influence their acts of inference. The metaphors, or analogies, are not merely convenient economies for expressing our knowledge; rather they *are* our knowledge and understanding of the particular phenomenon in question.”⁹⁵

Johnson thus admits of no alternative between two extreme views of metaphor, according to which they are either a superficially linguistic means of expressing preexisting knowledge or thoroughly constitutive of, indeed nothing other than, knowledge itself.⁹⁶ In championing the latter, he puts forward the clearest expression

⁹⁴ Subjects were asked to report on how they solved the problems, from which researchers extrapolated which model they were using. In another version of the experiment, subjects were first taught one of three models (two variations of “fluid-flow” and the “moving-crowd” model) and then asked to solve the problems. Results were consistent with the first experiment for resistor problems, but there was no difference among models for battery problems.

⁹⁵ Johnson, *The Body in the Mind*, 112.

⁹⁶ The Gentners’ own conclusions are far more modest than Johnson’s. They submit only that our analogies influence our inferences, that “analogies can have genuine effects on a person’s conception of a domain.” Dedre Gentner and Donald R. Gentner, “Flowing Water or Teaming

yet of Murphy's "strong view" of metaphoric representation, according to which representationally bankrupt target domains are *completely* structured by source domains.⁹⁷ The ample problems with such a view were pointed out in chapter 1, but one is particularly relevant here. If the metaphors we use simply *are* our knowledge, there would appear not only to be no way of noticing incorrect inferences in the target domain, but also no mechanism for revising or jettisoning a metaphor if it is unsuitable. Indeed the very idea of suitability or accuracy would be impossible without some indigenous understanding of the target domain. By erasing any separation between domains, Johnson renders us incapable of having perspective on those models or even recognizing them as such. By subsuming target within source so that reality is always already mediated, his account would seem to imprison us in a metaphoric determinism. Indeed, Johnson's very reflection on the role of metaphor in cognition (i.e. *MWLB*, *TBM*, etc.) would be impossible on his account.

These issues are seen even more clearly in Johnson's interpretation of Selye's work on stress, summarized above. In brief, he explains Selye's momentous formulation of stress as involving a move from the regnant conception of the BODY AS MACHINE to the novel conception of the BODY AS HOMEOSTATIC ORGANISM. Johnson's reconstruction of the process of that move, spurred by Selye's inability to make sense of his medical and experimental observations within the dominant MACHINE metaphor, is as follows:

Crowds: Mental Models of Electricity," in *Mental Models*, ed. Dedre Gentner and Albert Stevens (Hillsdale, NJ: Lawrence Erlbaum, 1983), 99.

⁹⁷ Murphy, "On Metaphoric Representation," 176–79.

The first step was his recognition that he was dealing with a syndrome of response, rather than a mere aggregate of symptoms. In searching for an explanation of the frustrating results of his sex hormone research, Selye began explorations we see as depending upon the power of the HOMEOSTASIS metaphor. Under the BODY AS HOMESTATIC ORGANISM one would tend to see every bodily response as serving some function. Thus, Selye began to understand this syndrome of response as having a general function...*Now* a new explanation was possible for these facts under the HOMEOSTASIS metaphor—the syndrome could now be seen as the body’s general adaptive response to toxicity.⁹⁸

In sum, Selye, a man in search of a metaphor for his ill-fitting observations, found one that “made it possible to understand...the cluster of symptoms previously discovered.”⁹⁹ It is plausible, however, that it was precisely the other way around: Selye’s coming to terms with his findings helped *create* the new metaphor, fashioning its contours and features as parallels of the *literal* ideas he was forming. Such a reading would be problematic for Johnson because it undermines the primacy and constitutive role of metaphor.

Of course neither reading is demonstrable, as it involves getting inside Selye’s head. There are, however, two reasons to prefer mine. First, it makes better sense of the emergence of the new metaphor (and new metaphors in general). In my reading, it was generated, or at least instigated, by new knowledge. For Johnson, it appears the emergence has to be either lucky or magical. If Selye truly had no grasp of the meaning of his observations, how could he go about finding a new metaphor to explain them? His search would have to be blind in some sense—he might stumble on a

⁹⁸ Johnson, *The Body in the Mind*, 131.

⁹⁹ *Ibid.*

metaphor that fits his observations in some way (and then determine if other inferences are fruitful), but there would be no way of knowing what to look for.¹⁰⁰ This does not render Johnson's account impossible, only, I would argue, phenomenologically dubious.¹⁰¹

Second, and perhaps more importantly, Selye's story, as Johnson conceives it, is not a story of exchanging one metaphor for another, for the second one, by Johnson's definition, is simply not a metaphor. The body is quite literally a homeostatic organism. Presumably, Johnson treats HOMEOSTASIS as a kind of BALANCE, specifically EQUILIBRIUM, metaphor. Yet, in his earlier exposition of those image schemas, Johnson asserts that "we understand the notion of systemic balance in the most immediate, preconceptual fashion through our bodily experience."¹⁰² In other words, EQUILIBRIUM emerges from our bodily experience of "systemic balance," namely physiological homeostasis. Remarkably, Johnson even exemplifies that experience with some of the same symptoms and processes that eventually led Selye to his breakthrough (unwittingly, of course):

¹⁰⁰ I would contend that Johnson's awareness on some level of this dilemma led him to make what at first seems like a curious claim in his reconstruction of Selye's thought process, quoted above. He writes, "[t]he first step was his recognition that he was dealing with a syndrome of response, rather than a mere aggregate of symptoms." Only after this does Selye adopt the new HOMEOSTASIS metaphor. But why is that adoption contingent on the first step? I would argue that Johnson realized that without it, Selye couldn't know how to find the right metaphor. In other words, that initial recognition puts him on the path towards a metaphor that can deal with the idea of "response." But Johnson's attempt to have his cake and eat it too self-destructs because that first step should, on his account, already depend on the metaphorical shift. That is, the notion of "a syndrome of response" does not exist in (is not a permitted inference of) the MACHINE metaphor (which lacks the agency to have such a thing); it is already a homeostatic notion.

¹⁰¹ Johnson's phenomenological aspirations are evident in the introduction where he describes his method as a "descriptive or empirical phenomenology" whose test of success is "comprehensiveness, coherence, and explanatory power." Johnson, *The Body in the Mind*, xxxvii.

¹⁰² Ibid., 75.

There is too much acid in the stomach, the hands are too cold, the head is too hot, the bladder is distended, the sinuses are swollen, the mouth is dry. In these and numerous other ways we learn the meaning of lack of balance or equilibrium. Things are felt as “out of balance.” There is “too much” or “not enough” so that the normal, healthy organization of forces, processes, and elements is upset.¹⁰³

Clearly, BODY AS HOMEOSTATIC ORGANISM cannot be considered a metaphor if the “target” is the paradigmatic case that grounds the “source.”

What for Johnson is an example of metaphor’s constitutive influence on perception and cognition (i.e. the Selye story), I would argue instead demonstrates our manifest ability to push back against the influence of metaphorical models and towards a more suitable (even non-metaphorical) framework for explaining our reality. That ability presupposes our ability to achieve perspective on our models, to see them *as* models, to question their accuracy with respect to the reality they frame, and to shape them as much as they shape us. It is this perspective, this essential distance, that is precisely denied by Johnson’s treatment of metaphor as absolutely constitutive. Ironically, Johnson’s very project of exploring the role of metaphor would be impossible if his account were right. Here, as elsewhere, Johnson mistakes an essentially conceptual *interpretation* (and a flawed one at that) for a cognitive *explanation*.

The same flaw—mistaking analysis for explanation—subtends Johnson’s experiential/image-schematic derivation of various laws of logic. The CONTAINER schema, he argues, generates the “law of the excluded middle” in the following manner:

¹⁰³ Ibid.

It follows from the nature of the CONTAINER schema (which marks off a bounded mental space) that something is either *in* or *out* of the container **in typical cases**. And, **if** we understand categories metaphorically as containers (where a thing falls within a container, or it does not), then we have the claim that everything is either P (in the category-container) or not-P (outside the container). In logic, this is known as the “Law of the Excluded Middle,” that is, there is no third possibility between possessing a property (i.e. falling within a category) or not possessing that property (falling outside the category). **In those cases**, therefore, **where** we understand certain phenomena via CONTAINER metaphors (and **most of us** operate with such simplified models **much of the time**), the principle “Either P or not-P” has an intuitive basis in our daily experience with containment.¹⁰⁴

It is unclear how such a contingent account (contingencies in bold¹⁰⁵) is meant to explain the experiential basis of a culturally shared logical law. Perhaps part of the problem is that Johnson never establishes or defends satisfaction criteria for experiential bases. His methodology seems instead to involve the same problematic hypothesis confirmation procedure of *MWLB* (highlighted by Ortony¹⁰⁶): if a concept can be found in image-schematic structure, then that must be the concept’s basis.¹⁰⁷

¹⁰⁴ Ibid., 39. Using the same reasoning, he derives the law of negation.

¹⁰⁵ I would include two more, unstated contingencies: propositions (what ‘P’ stands for) must be understood as properties, and then properties must be understood as categories.

¹⁰⁶ Andrew Ortony, “Are Emotion Metaphors Conceptual or Lexical?,” *Cognition & Emotion* 2, no. 2 (1988): 99.

¹⁰⁷ Or, more generally, as Vervaeke and Kennedy, characterizing Johnson’s modus operandi, put it: “[O]nce a metaphor is shown to be a version of a schema Johnson deems the work of understanding the nature of the metaphor to be complete. The trick, for Johnson, is to find the schema, and once that ‘image’ is found then Johnson takes it that ‘human understanding is image-schematic through and through, from the most primitive and mundane unreflective acts of perception and motor activity all the way up to abstract reasoning and argument.’” John M. Kennedy and John Vervaeke, “Metaphor and Knowledge Attained via the Body,” *Philosophical*

But that depends on accepting the larger claims of IST, namely that image schemas are the foundation of reasoning. More importantly, that depends on who fashions the image schemas and what structure is imputed to them. Johnson recognizes that despite the implications of the two-dimensional CONTAINER schema, entities *can* be neither in nor out, hence the qualifier “in typical cases.” In fact, however, in *all* the experiences Johnson cites as the basis for the schema—breathing, eating, entering rooms, etc.—there is the possibility of being both/neither in and/nor out. Moreover, if we are to take the kinesthetic aspect of image schemas seriously, the transition from inside to outside a container, or vice versa, is an essential part of its dynamic structure. It is no surprise, then, that the container language we use often (“typically”?) makes use of this facet (“on its way out,” “sticking out,” “almost in,” “on the boundary,” “overflowing,” “on the edge,” even “entering”¹⁰⁸). It is, then, only by *neglecting* structural features of CONTAINER that Johnson derives the foundation of various logical concepts.¹⁰⁹

Psychology 6, no. 4 (1993): 409. Even if we take these similarities between image-schematic structure and logic to be genuine, correlation is not causation.

¹⁰⁸ Or, understanding colors as categories, that turquoise is both/neither green and/nor blue.

¹⁰⁹ Even if Johnson’s account were internally coherent, there is yet another caveat that should attend his explanatory venture here, unmentioned by Johnson, but admitted by Lakoff: “[T]he fact that reasoning *can* be done with them [i.e. image schemata] does not prove that reasoning *is* done with them.” Lakoff, *Women, Fire, and Dangerous Things*, 459. Scholnick and Cookson add another important proviso: “Even though metaphors can be used to construct abstract concepts and tools of thought, that neither proves that abstract concepts are constructed metaphorically or that the metaphors chosen by experiential realists are the child’s first entry into particular abstract domains. In addition, the translation of meaningful images into formal rules requires a more detailed theory of the detection of similarities and mapping relations than cognitive semantics currently provides.” Ellin K. Scholnick and Kelly Cookson, “A Developmental Analysis of Cognitive Semantics: What Is the Role of Metaphor in the Construction of Knowledge and Reasoning?,” in *The Nature and Ontogenesis of Meaning*, ed. Willis F. Overton and David Stuart Palermo (Hillsdale, NJ: L. Erlbaum Associates, 1994), 120.

There are two issues here: who decides what is typical and what is the role of typicality in determining the form of image schemas? And more generally, how exactly are these embodied patterns (i.e. image schemas) abstracted from experience and at what level of generality/specificity? Johnson addresses none of these. His image schemas are asserted to be cognitively real, constantly structuring our experience and, via their *structural* “entailments,” our (metaphorical) understanding. Their structure is therefore an empirical issue with great cognitive consequences. His failure to recognize the traces of his interpretation or explain the mechanism of pattern emergence—an aspect one would think absolutely central to IST—is therefore deeply problematic.

This unnoticed interpretive leeway in determining structure introduces the possibility of ad hoc reasoning. To wit, Johnson’s image schema (can) have whatever “definite internal structure” he needs them to have to “generate” the entailments he wants.

From a developmental psychological standpoint, too, Johnson’s derivation of category-inclusion from CONTAINER (presupposed in the “law of the excluded middle” derivation) is, as the psychologists Scholnick and Cookson argue, potentially unsound:

We use developmental research on children's knowledge of taxonomies to argue that knowledge of containers and part-whole relations may be insufficient to derive the formal logic of class inclusion. Because children do not exploit the full implications of the container schema we question whether it structures category formation or simply bolsters already present category knowledge.¹¹⁰

¹¹⁰ Scholnick and Cookson, “A Developmental Analysis of Cognitive Semantics: What Is the Role of Metaphor in the Construction of Knowledge and Reasoning?,” 120–21. More specifically, “We argue that if the container schema structures our knowledge of categories, a

Yet a different problem undoes Johnson's derivation of our understanding formal reasoning itself from PATH, FORCE, and CONTAINER schemas:¹¹¹

When we reason, we understand ourselves as starting at some point (or proposition or set of premises), from we proceed in a series of steps to a conclusion (a goal, or stopping point). Metaphorically, we understand the process of reasoning as a form of motion along a path—propositions are the locations (or bounded areas) that we start out from, proceed through, and wind up at.¹¹²

The force of logic moves from one propositional location to another—forcing us to conclusions. From this, the basic axiom of the logic of logical necessity follows:

$\Box P \rightarrow P$ ("If P is logically necessary, then P is true.") If the force of logic operates to move you to a certain "place," then you wind up in that place.

Given our understanding of negation in terms of the CONTAINER schema (not-P is located outside the bounded space defined by P), the intuitive relation between necessity and possibility follows immediately:

body of implications should be present very early. The child should know that a category delimits objects belonging to a class from those that do not. But research on formation of classes shows a piecemeal emergence of this insight.... Yet another reason for doubting an image schema underlies understanding is that toddlers only group together items that are practically identical, as opposed to members of basic categories. The slow mastery of sorting skills does not suggest that the child's performance is automatically guided by a coherent theory of category extension based on some underlying schema. Perhaps the structure is there, but the child has difficulty mapping it." (Ibid.)

¹¹¹ Though this problem is also applicable to the derivation of the law of the excluded middle from CONTAINER.

¹¹² Johnson, *The Body in the Mind*, 38.

$\sim\Box\sim P\rightarrow\Diamond P$ (“If it is not logically necessary that P is false, then it is logically possible for P to be true.”)¹¹³

Even granting the details of Johnson’s account (i.e. neglecting my argument against his derivation of negation from CONTAINER), what he has given is not an explanation of the basis of formal reasoning, i.e. how logic works, but a superficial description of its overall form. As Rakova remarks, “to say that someone arrived at a proposition A does not in the least clarify how he or she arrived there, i.e., the fact that we talk of propositions as if they were locations is no explanation for those cognitive mechanisms which make such inferences possible.” “One cannot,” argue Kennedy and Vervaeke, “reduce reasoning to temporal order.”¹¹⁴ Equally, to say that logical necessity is the “force of logic” moving you to a certain place says nothing about the source of that force—in other words how or why a particular logical maneuver is cogent. To say that a proposition’s truth equates to being in a container says nothing about how or why it got in there—in other words, how it is determined that a proposition is true. This is *de dicto* analysis masquerading as *de re* explanation.

In chapter 1, following Murphy and Haser, I underlined the basic difficulties attending L&J’s account of cross-domain mapping. Murphy argued that CMT requires inherent target domain structure to be both minimal, in order to accept metaphorical projection, and maximal, to prevent incorrect inferences. Haser argued that the “experiential basis” of conceptual metaphors appear to presuppose the very

¹¹³ Ibid., 63–64.

¹¹⁴ Kennedy and Vervaeke, “Metaphor and Knowledge Attained via the Body,” 409.

understanding of the target domain that the metaphorical projection is meant to confer. The introduction of image schemas in *TBM* adds a new layer to the story of cross-domain mapping. Rather than mitigating or solving these difficulties, however, it aggravates and codifies them, rendering the entire phenomenon of conceptual metaphor confused beyond intelligibility.

In *TBM*, “experiential correlation” still grounds conceptual metaphors. Johnson maintains, for example, that MORE IS UP arises from regular co-occurrences in experience, for example seeing the level of a pile rise when objects are added to it, or the level of liquid in a container rise when more is poured in. In addition, however, now the metaphor “is based on, or is an instance of,...the SCALE schema,”¹¹⁵ by which Johnson means that both source and target domains are instances of SCALE, the schema that subtends experiences of increase and decrease. Let us call these type-1 projections. But this is precisely *not* the mechanism of metaphorical projection Johnson describes time and again:

¹¹⁵ Johnson, *The Body in the Mind*, 122. The introduction, however, presents a different formulation: “we understand QUANTITY in terms of the VERTICALITY schema.”(Ibid., xv). Assuming these are meant to be two versions of the same idea, VERTICALITY must be a specification, variation, or sub-schema of SCALE (the more general schema). Johnson asserts, however, that VERTICALITY emerges “from our tendency to employ an up-down orientation in picking out meaningful structures of our experience.”(xiv) It is furthermore unclear if QUANTITY is meant to be a schema or a concept (one of the other entities that receives caps, along with domains and metaphors – clearly this system does not aid clarity). (And presumably there is no difference between it and “amount” or AMOUNT, the term(s) Johnson uses in the later account (i.e. Ibid., 121-22)). Perhaps these differences are more semantic than cognitive. Then again, for a “cognitive semantics”, they might be consequential. Specifically, the meta-structure of schemas is never systematically addressed. The discussion of BALANCE and FORCE schemas suggests that there is or at least can be a categorial organization: BALANCE incorporates four schemas (Johnson’s figures 17-20, Ibid., 86-87), with the TWIN-PAN BALANCE schema the “prototypical” version. Yet it is never explained if this organization plays a role (and if so what role) in image-schematic operations (i.e. in our experience) or is just a conceptual organization by Johnson. Nor is it explained if prototypicality is a function of conceptual, experiential, or other factors.

Through metaphor, we make use of patterns that obtain in our physical experience to organize our more abstract understanding. ...our bodily movements and interactions in various physical domains of experience are structured (as we saw with image schemata), and **that structure can be projected by metaphor onto abstract domains.**¹¹⁶

We saw...that balance in visual perception already involves a **metaphorical projection of schematic structure** from the realm of the *physical* and gravitational forces and weights to a domain of *visual* forces and weights in “visual space.”¹¹⁷

In so many words, the thing that is projected in “metaphorical projections” is image-schematic structure. Thus Johnson refers simply to “schematic metaphorical projections” or “metaphorically extended image schemata.”¹¹⁸

Hence the contradiction: since MORE is already structured by SCALE, the metaphorical projection of UP’s schematic structure (i.e. SCALE) is superfluous.¹¹⁹ Furthermore, MORE, being already directly structured by an image schema—meaning it is a non-abstract, physical domain of experience—definitionally does not require

¹¹⁶ Johnson, *The Body in the Mind*, xv. [my emphasis]

¹¹⁷ Ibid., 99.

¹¹⁸ Ibid., 98, 101.

¹¹⁹ Even according to another possible reading (which is not made explicit in Johnson)—that VERTICALITY (as a variation or specification of SCALE) is UP’s schema and MORE IS UP confers VERTICALITY on MORE’s SCALARITY, enabling the linguistic borrowings from UP—the story fails to make sense. Johnson would still have to explain why MORE, having schematic structure, needs any help from UP. Furthermore, as I argue in the following note, MORE should not need UP’s language anyway as it already possesses literal equivalents for all UP terminology.

further structuring for our comprehension of it. By Johnson's own logic, metaphorical projections between schematic domains are unnecessary.¹²⁰

Moreover, Johnson's system actually forces him into this contradiction, for it would appear that "experiential correlation" *depends on* image-schematic commonality. It is precisely two domains' common image-schematic structure that allows for a point-to-point isomorphism in the first place. In other words, it is only because MORE and UP are both already SCALES that a "rise" can be correlated with an "increase" and a "fall" with a "decrease." But this yields the circle in Johnson's logic: image-schematic commonality between source and target is presupposed in the grounding of the metaphor whose purported purpose is to project that very structure from the former to the latter.¹²¹

The type of metaphorical projection that Johnson actually discusses in his theoretical exposition, namely that from an image-schematic domain to a schema-less

¹²⁰ The projection is redundant for yet another reason. In general, what is accomplished along with the imposition of schematic structure is the importation of the terminology associated with that structure; Hence the metaphorical language that then characterizes the target domain. For MORE IS UP, not only is there no need for the structure (as it already has scale structure), but there should also be no need for up language. For all the literal language of up, more appears already to have equivalents: for "high/up" it has "more," for "rise" it has "accumulate/increase," etc. This is just another way of saying it is independently, directly structured. It is no surprise, then, that Johnson (or L&J in *MWLB*) never explains why more is considered an abstract domain. By their definition, it is not.

¹²¹ The same is true for the (only) other metaphorical projection of this type discussed, namely PURPOSES ARE PHYSICAL GOALS (later renamed PURPOSES ARE DESTINATIONS). It is only because the domains of intention and physical action are both already PATH schemas that they can be meaningfully correlated. He admits as much in a 1991 article, in which he rehearses the experiential grounding story of *TBM* (discussed above): "There arises, then, a connection in our experience between structure in the domain of intentions and structure in the domain of physical actions." Mark Johnson, "Knowing through the Body," *Philosophical Psychology* 4, no. 1 (1991): 11. That "structure" is, of course, image schematic, specifically SOURCE-PATH-GOAL. The projection of that very schema in the metaphor is thus both redundant and circular. And Johnson's assertion that "the metaphorical mapping is isomorphic with the experiential pairing," (Ibid., 116) is not an insight or discovery, but mere tautology.

abstract domain (which I will call type-2 projections) fares no better. It is, in a sense, the inverse of the problem with type-1 projections. For without image-schematic commonality, effectively the enabler of “experiential correlation”, there is nothing to pair source and target domain experientially, hence no grounding for the metaphor. How are ARGUMENTS and CONTAINERS, EMOTIONAL HEALTH and EQUILIBRIUM, or MORAL JUDGMENT/MATHEMATICAL EQUALITY and BALANCE, correlated in experience? Johnson is silent on this question. The problem is actually deeper, for not only do these sets of domains happen not to be experientially correlated, but Johnson’s system makes a correlation impossible. Because image-schematic structure is “experientially formative,” “the level that defines form itself,”¹²² that is, constitutive of experience, prior to the target domain’s metaphoricization (i.e. image-schematic importation), there is simply no experience with which the source domain could be correlated.¹²³ How could anything be meaningfully correlated with an “undifferentiated mush”?

The introduction of image schemas thus only exacerbates the inadequacies of *MWLB*’s account of structure and experiential grounding, indeed codifying the confused logic subtending it. Either way Johnson construes the grounding and dynamics of metaphorical projection—as based on a common image schema or between an image-schematic and abstract domain—contradiction results. Image-schematic domains cannot structure other image-schematic domains because the latter are already structured, and they cannot structure abstract domains because there is no

¹²² Johnson, *The Body in the Mind*, 208.

¹²³ In *MWLB*, the correlated experience turns out to be the very experience structured by the metaphorical projection, giving rise to a circularity identified by Haser (see chapter 1).

experience to correlate them. Projections of the former kind are redundant and of the latter kind impossible.¹²⁴

The core issue can be restated, to return to Murphy's framing, in terms of inherent target domain structure. Johnson needs the target domain to have image-schematic structure already for it to be an intelligible domain at all and for it to be experientially correlated in the first place. But he also needs it be without image-schematic structure for the projection of image-schematic structure to occur and be useful. His attempt to have it both ways—for an image schema be both the basis of the projection and the thing projected—results first in his presenting two contradictory accounts of metaphorical projection, and, in particular, the circular reasoning that undoes type-1 projections.¹²⁵

It also leads to blatantly contradictory accounts in two subsequent publications. Recall that in *TBM*, PURPOSES ARE DESTINATIONS is presented as a type-1 projection, i.e. both domains are inherently structured by PATH.¹²⁶ In a 1991 article, the same

¹²⁴ That Johnson puts forward not one but two versions of conceptual metaphor can perhaps be seen to issue from his implicit awareness of the two-horned dilemma. In other words, the dilemma explains the otherwise curious fact that Johnson's theoretical discussion of metaphorical projection deals exclusively with type-2 projections yet the only specific examples he gives that attempt to elucidate the mechanism of structuring involves type-1 projections. Specifically, the latter would be incoherent to explicate theoretically and the former incoherent to exemplify.

¹²⁵ The most concise statement of this circularity is presented by Johnson himself, in his response to Kennedy and Vervaeke's criticism, discussed presently, of the circularity: "By virtue of common features and image-schematic structure shared between two conceptual domains, we construct metaphors in which we project structure from a domain of one kind (the source domain) onto a domain of a different kind (the target)." Mark Johnson, "Conceptual Metaphor and Embodied Structures of Meaning: A Reply to Kennedy and Vervaeke," *Philosophical Psychology* 6, no. 4 (1993): 413. The problem, again, is that the "structure" by virtue of which the mapping is possible is identical with the "structure" that is allegedly projected in the metaphor.

¹²⁶ Johnson, *The Body in the Mind*, 115.

metaphor, with the same experiential grounding story, instead involves “[o]ur projection of the SOURCE-PATH-GOAL in our understanding of intentional activity [i.e. PURPOSES].”¹²⁷ Kennedy and Vervaeke rightly criticize the circularity of this view:

...what made the connections possible in the first place is, apparently, that intended actions and tracking an object from A to B have the same schema. It is not clear, then, how intended action could derive its schema in the first place from a projection that rests on connections that can only be made if the schema is already present! This is a chicken-and-egg problem that Johnson skirts around and does not recognise. Indeed, once Johnson asserts that the schema allows the connections, and the connections allow projection, he then claims the projection is a metaphor that constitutes “our very understanding of intentional action itself.”¹²⁸

In short, schematic structure cannot be both the grounding connection that enables the projection and also the thing projected. In his response to their critique (which, I would argue, he misunderstands¹²⁹) Johnson produces the most confused and contradictory exposition of conceptual metaphor yet. He changes his position again, affirming that (now in reference to LOVE IS A JOURNEY), “[t]here most definitely is a

¹²⁷ Johnson, “Knowing through the Body,” 11. (PATH was renamed SOURCE-PATH-GOAL around this time.)

¹²⁸ Kennedy and Vervaeke, “Metaphor and Knowledge Attained via the Body,” 408.

¹²⁹ “They insist that I am stuck with the following chicken-and-egg problem. If metaphors are mappings between two different conceptual domains, then each of those domains must already be conceptually determinate and well-structured. And if metaphors are based on common features between two domains, then those features must pre-exist, and we cannot claim that the target domain derives structure from the source domain.” Johnson, “Conceptual Metaphor and Embodied Structures of Meaning,” 414. This is not Kennedy and Vervaeke’s argument, the crux of which is quoted above, but rather a straw man of Johnson’s making (which, ironically, in his attempt to dismiss it, only ends up showing how trenchant the true critique is).

shared image-schematic structure between these two domains, namely, the ‘source-path-goal’ image schema.”¹³⁰ Perhaps realizing that this would render the mapping unnecessary (as I argued above), Johnson introduces a new fold in the story: “But, on the basis of this shared structure, we go further to take the logic of the source domain and project it onto the target domain to give rise to new structure in the target domain.”¹³¹ For this explanation to carry any weight, a domain’s “logic” would have to be something different from its schematic structure, otherwise, again, the target domain, which already has the schematic structure, would already have the “logic” as well. Yet this is precisely not the case, as he makes clear throughout the article:

Image schemas that arise in our sensorimotor interactions **have their own** “spatial” or “corporeal” logic.... The logic of a particular image schema (**which is based on its internal structure**)....

The “source-path-goal” schema **defines its own** definite corporeal logic.¹³²

In other words, what Johnson here calls “logic” is nothing other than what he called “structural entailments” in *TBM* (e.g. the transitivity of CONTAINMENT, reflexivity of

¹³⁰ Ibid., 418. Why LOVE should inherently have SOURCE-PATH-GOAL structure is far from obvious, not explained in his discussion, and contradicted by L&J’s assertion in *MWLB* that “LOVE is not a concept that has a clearly delineated structure; what-ever structure it has it gets only via metaphors.” Lakoff and Johnson, *Metaphors We Live by*, 110. This in spite of the fact that three pages earlier he also reaffirms the other position: “metaphors involve a mapping of structures and features (including image-schematic structure) from a source domain onto a target domain.” Johnson does not explain what he means by “features” or (the implied) non-image-schematic structures.

¹³¹ Johnson, “Conceptual Metaphor and Embodied Structures of Meaning,” 418.

¹³² Ibid., 415–16. [emphasis added]

BALANCE, etc.). Because the “logic” of a schema is a property of its structure, it is incoherent to argue that a mapping between two SOURCE-PATH-GOAL domains consists of projecting the “logic” of the source onto the target. By definition, the target domain already has it.

Lakoff fares no better with his contemporaneous attempt to elucidate the mechanism of cross-domain mapping. Indeed, his “invariance principle” is subtended by circular reasoning:

In the examples we have just considered, the image-schemas characterizing the source domains (containers, paths) are mapped onto the target domains (categories, linear scales). This observation leads to the following hypothesis, called *The Invariance Principle*: Metaphorical mappings preserve the cognitive topology (that is, the image-schema structure) of the source domain, in a way consistent with the inherent structure of the target domain. What the Invariance Principle does is guarantee that, for container schemas, interiors will be mapped onto interiors, exteriors onto exteriors, and boundaries onto boundaries; for path-schemas, sources will be mapped onto sources, goals onto goals, trajectories onto trajectories; and so on.”¹³³

It is only as a result of the mapping (see first sentence) that the target domain gains image-schematic structure, i.e. interiors, boundaries, sources, etc. That is, in fact,

¹³³ George Lakoff, “The Contemporary Theory of Metaphor,” in *Metaphor and Thought*, ed. Andrew Ortony, 2nd ed (Cambridge, England; New York: Cambridge University Press, 1993), 215. Cf. Lakoff’s earlier version, called the “invariance hypothesis”: “Metaphorical mappings preserve the cognitive topology (this is, the image-schema structure) of the source domain.” George Lakoff, “The Invariance Hypothesis: Is Abstract Reason Based on Image-Schemas,” *Cognitive Linguistics* 1, no. 1 (1990): 54. Absent the culminating clause of the “principle,” the “hypothesis” appears to claim nothing more or other than what Johnson spends the entire *TBM* arguing for, namely that conceptual metaphors are projections of image-schematic structure. It is rather odd, then, that Lakoff, as if ignorant of his partner’s recent book, claims it as his own finding.

precisely the *raison d'être* of the conceptual metaphor. To then claim that “interiors will be mapped onto interiors,” etc. is nonsensical, for there was no (target) interior before the mapping, and if there were, the mapping would be unnecessary. Thus, the “inherent structure of the target domain” (the first mention of such a notion in the thirteen years since *MWLB*) turns out to be precisely that which is mapped onto it by the metaphor.¹³⁴

The continuation of the above explication only deepens the contradiction:

To understand the Invariance Principle properly, it is important not to think of mappings as algorithmic processes that *start* with source domain structure and wind up with target domain structure.... One should instead think of the Invariance Principle in terms of constraints on fixed correspondences: If one looks at the existing correspondences, one will see that the Invariance Principle holds: source domain interiors correspond to target domain interiors; source domain exteriors correspond to target domain exteriors; etc. As a consequence it will turn out that the image-schematic structure of the target domain cannot be violated: One cannot find cases where a source domain interior is mapped onto a target domain exterior, or where a source domain exterior is mapped onto a target domain path. This simply does not happen.¹³⁵

There are no “fixed” or “existing correspondences” until the mapping establishes them. Target domain interiors, trajectories, etc. cannot already exist and also be projected by the metaphor. What Lakoff presents as insight is tautology, for the target domain has no pre-mapping image-schematic structure that could be violated.

¹³⁴ For a similar argument, see Verena Haser, *Metaphor, Metonymy, and Experientialist Philosophy: Challenging Cognitive Semantics* (Berlin ; New York: Mouton de Gruyter, 2005), 150.

¹³⁵ Lakoff, “The Contemporary Theory of Metaphor,” 215.

My critique thus far has highlighted several shortcomings, difficulties, and aporiae in Lakoff and Johnson’s philosophy. I have argued that the very notion of image schemas is beset by paradox, if not contradiction, and that their purported cognitive indispensability is unsubstantiated. The evidence for their existence consists either of restatements of CMT, which I have challenged separately, questionable, if not unsound, interpretations of psychological and philological findings, or methodologically flawed psycholinguistic experiments. Johnson’s treatment of metaphor as completely constitutive of understanding—erasing any epistemological separation between target and source—would deny our manifest ability to recognize them *as* metaphors, let alone examine (e.g. *MWLB*, *TBM*), question, and change them. The account(s) of metaphorical mapping by “experiential correlation” is rendered incoherent by Johnson’s conditioning of intelligible experience on image-schematic structure. Abstract (i.e. schema-less) target domains cannot yield experience with which to be correlated and concrete (schematic) domains, even if correlated, do not require the structure conferred by the mapping.

More globally, I have suggested that Johnson’s alleged explanations (e.g. Selye) and derivations (e.g. of logical laws) appear instead to be conceptual, interpretative overlays (and questionable ones at that), that the image-schematic model of cognition is essentially a reading back of “adult” conceptualizations into cognitive processes that do not necessarily resemble or make use of such structures and mechanisms. The ensuing phenomenological critique corroborates this accusation of “psychological fallacy.”

The majority of these theoretical complications can be seen to issue from the foundational claim that image schemas are prerequisite for, indeed create, intelligible experience, that schema-less experience (an oxymoron by Johnson's account) would be an "undifferentiated mush." It is this claim that generates the paradox of image schema emergence by necessitating their presence in the very experiences that supposedly give rise to them. It lies, as mentioned, at the heart of the circularity of "experiential correlation" by denying the target domain the basic sense it would need to be meaningfully correlated. And because metaphorical projection is essentially image-schematic projection, the latter's constitutiveness is passed on to the former, resulting in the metaphoric blindness and determinism discussed above

But why make the metaphysical assumption, as Kant does, that the world is inherently formless, thereby necessitating an account of how we mentally structure it? For one, nothing in our conscious experience evidences such a thoroughgoing *configuration* of an otherwise meaningless reality. Rather, the world appears to us as always already meaningful. "We must not...wonder whether we really perceive a world," Merleau-Ponty exhorts in *Phenomenology of Perception*, "we must instead say: the world is what we perceive." Of course this is not, nor meant to be, a knockdown argument against Idealism, Kantian or otherwise. Theories that rely on essentially hidden mental processes, as we saw with CMT, are perhaps impossible to truly refute. Merleau-Ponty's tack is instead to expose the inadequacies and internal inconsistencies of such a view, specifically showing how they necessarily miss or cannot explain certain basic aspects of experience. A fuller discussion of his arguments against the "traditional prejudices" of "empiricism" (e.g. Berkeley, Hume) and "intellectualism"

(e.g. Descartes, Kant)—the former positing sensation, the latter judgment as the building blocks of perception—appears in chapter 4. My aim here is to consider a few of his key objections to intellectualism—along with elaborations by Hubert Dreyfus and Charles Taylor—and to demonstrate their applicability to L&J’s project, particularly IST. Though image schemas represent an advance over the mental representations and categories of classical intellectualism, I maintain that, despite their purportedly embodied origins, they operate in essentially the same way, namely as abstractions that structure a senseless external reality.

Resting fundamentally on a dichotomy of mental (inner) and physical (outer), intellectualism’s basic task is to elucidate their interaction. Its premise, as summarized by Taylor, is that “[k]nowledge of things outside the mind/agent/organism only comes about through certain surface conditions, mental images, or conceptual schemes within the mind/agent/organism. The input is combined, computed over, or structured by the mind to construct a view of what lies outside.”¹³⁶ In this dualistic picture, our knowledge of the world is fundamentally *mediated*, giving rise to two basic questions: whence these images or schemes? and how are they appropriately applied in specific situations?

The trouble with the first question is that these images or schemes cannot, on pain of circularity, emerge from the very reality they are instrumental in structuring. Thus Kant’s *categories* are asserted to be *a priori*, though this does not solve the problem as much as hide it. Descartes’s *ideas*, in particular their instantiations as little pictures of

¹³⁶ Charles Taylor, “Merleau-Ponty and the Epistemological Picture,” in *The Cambridge Companion to Merleau-Ponty*, ed. Taylor Carman and Mark B. N. Hansen (Cambridge, UK; New York: Cambridge University Press, 2005), 27.

the outside world, only begs the question of the interpretation of those representations, leading to the well-known homunculus problem.¹³⁷

As for the second question, Dreyfus, following Merleau-Ponty, and speaking of more recent intellectualist incarnations—e.g. mainstream cognitivism—summarizes one of the attending difficulties:

[T]he intellectualist cannot explain how the organism could possibly use features of the current situation to determine which rule or concept should be applied. There are just too many features, so the selection of relevant features requires that one has already subsumed the situation under the relevant concept.¹³⁸

Though Dreyfus here refers specifically to the domain of skill acquisition, the same problem attends perception generally. And this problem again boils down to a circularity: if schemes are required to make sense of reality in the first place, there is no underlying sense that could summon the appropriate scheme.

Even if the right scheme or concept is somehow applied, a further problem ensues, that of incorrigibility about our own perception. For by binding judgment (i.e. schemes, categories, etc.) to perception, making the latter a condition, or even nothing

¹³⁷ For a discussion of more recent versions of the intellectualist mediational term (i.e. images, categories, beliefs, etc.) see *Ibid.*, 28–33. For a thorough critique of cognitivist mental representations, see Benny Shanon, *The Representational and The Presentational: An Essay on Cognition and the Study of Mind* (Hertfordshire, England: Harvester Wheatsheaf, 1993), 259–308. See Hasty bibliography for more.

¹³⁸ Hubert L. Dreyfus, “Merleau-Ponty and Recent Cognitive Science,” in *The Cambridge Companion to Merleau-Ponty*, ed. Taylor Carman and Mark B. N. Hansen (Cambridge, UK; New York: Cambridge University Press, 2005), 129. For his Merleau-Pontyan critique of cognitivist models of artificial intelligence, see Hubert L. Dreyfus, *What Computers Still Can't Do: A Critique of Artificial Reason* (Cambridge, Mass.: MIT Press, 1992). See also Hubert Dreyfus, “Intelligence Without Representation—Merleau-Ponty's Critique of Mental Representation: The Relevance of Phenomenology to Scientific Explanation,” *Phenomenology and the Cognitive Sciences* 1, no. 4 (2002): 367–83.

other than, the former, there can be no way to know if a judgment is wrong. As Merleau-Ponty puts it, ““if we see what we judge, how can we distinguish between true and false perception?”¹³⁹

A seed of these difficulties, as suggested above, is the supposition of an orderless external reality and thus the necessity for *mediation* between it and us. The way out, then, is to recognize that our primal interaction with the world is directly meaningful, that we are not disembodied minds in a chaotic nature, but embodied beings who skillfully cope with their surroundings. And this is possible because there are not two terms—physical/mental or inner/outer—but a unitary phenomenon, *being-in-the-world*, which is prior to, and ultimately a condition for the intelligibility of, such intellectualist conceits. “[O]ur body is not an object for an ‘I think’, it is a grouping of lived-through meanings.”¹⁴⁰ One of Merleau-Ponty’s radical achievements is to ground our knowledge of the world in our embodied negotiation of it.

The last predicate could have been taken right out of *The Body in the Mind*. Indeed, Johnson sees himself as advancing (in both senses) Merleau-Ponty’s agenda, specifying and systematizing the bodily bases of meaning.¹⁴¹ He rejects the notion of an objective reality—a feature of “objectivism”—and intellectualist mainstays like *a priori* concepts and mental images. Yet despite these and other facets of his project that appear to pit him against intellectualism, I contend that he is in fact closer to Kant than

¹³⁹ Maurice Merleau-Ponty, *Phenomenology of Perception*, trans. Colin Smith (London; New York: Routledge, 2002), 40.

¹⁴⁰ *Ibid.*, 177.

¹⁴¹ Mark Johnson, “Merleau-Ponty’s Embodied Semantics—From Immanent Meaning, to Gesture, to Language,” *Euramerica* 36, no. 1 (2006): 1–27.

Merleau-Ponty, that his notion of embodiment is ironically intellectualist, and that his approach suffers accordingly.

The key aspects of the intellectualist model are central features of Johnson's philosophy. As shown above, he explicitly posits a meaningless world precisely to highlight the basic, indispensable work that image schemas perform:

Without them [i.e. image schemata] our experience would be an undifferentiated mush.¹⁴²

What makes experience intelligible, in fact what makes it *experience* at all, are image schemas. In other words, they do the same kind of work that Kant's schemas do, namely they *mediate* our knowledge of the world. This much is made plain by Johnson, whose use of the term "derives from its original use as it was first elaborated by Immanuel Kant."¹⁴³ But whereas Kant's structures of imagination were *a priori*, Johnson wishes to derive them from the very experiences they supposedly structure, resulting in the paradox outlined above.

Like Kant's schemas, Johnson's are abstract, indeed abstracted from our early, embodied experiences.¹⁴⁴ In the most basic sense, then, they *represent* the world. And like classic mental representations, they are applied in specific situations to structure them. But how? Again no account is provided. The problem of appropriate

¹⁴² Johnson, *The Body in the Mind*, 206.

¹⁴³ Ibid., 24.

¹⁴⁴ Johnson, *The Body in the Mind*, 24, xiv., 24.

application is apparently not recognized by Johnson, who just assumes the relevant schema is activated when it is relevant:

An actual COMPULSION schema exists as a *continuous, analog* pattern of, or in, a particular experience of cognition that I have of compulsion. It is present in my perception of a jet airplane being forced down the runway...or (metaphorically) in my felt sense of being forced by peer pressure to join the PTA. The schema proper is not a concrete rich image or mental picture; rather it is a more abstract pattern that can be manifested in rich images, perception, and events.¹⁴⁵

In virtue of which features of these experiences does COMPULSION get summoned? How does this actually happen in real time? The problem is not just that no account is given, but, as Dreyfus argues, no account could be given. Of the innumerable features of even the simplest experiences, the selection of the right ones to subsume under the right schema would seem to be impossible. The experience would *already* have to be understood as an instance of the schema. For all his attention to embodied meaning, Johnson pays little attention to its necessarily taking place in time.

The intellectualist problem of incorrigibility shows up for Johnson once a schema or metaphor (i.e. image-schematic projection) is applied. As argued above, because image schemas, or their projections, *constitute* our experience and knowledge, there can be no way of recognizing if the wrong one was applied. By collapsing experience and schema—essentially arguing that all experience is schematized—Johnson denies the underlying experience against which a schema or metaphor could be checked.

¹⁴⁵ Ibid., 2.

Here, then, is the critical difference between Johnson's and Merleau-Ponty's versions of embodiment: for the former, it is not our actual, situational, specific embodied maneuverings in the world, but their generalized, abstract structure, that grounds meaning. This crucial step of *mediation* leads to the various intellectualist difficulties raised above. For Merleau-Ponty, embodied coping happens in each and every situation and is not governed by representations, schematic or otherwise. "Movement is not thought about movement, and bodily space is not space thought of or represented."¹⁴⁶ On this account, as Dreyfus puts it, "the best 'representation' of our practical understanding of the world turns out to be the world itself."¹⁴⁷ Embodiment, for Merleau-Ponty, entails the embedding of knowledge (conceptual as well as practical), not as abstract structures in the mind but in the body's unmediated *being-in-the-world*. For Johnson, embodiment provides the raw material, as it were, for the schemas that actually make experience intelligible, along the intellectualist model. Johnson's characterization of his project as "putting the body back into the mind" perfectly captures the problem.¹⁴⁸

¹⁴⁶ Merleau-Ponty, *Phenomenology of Perception*, 159.

¹⁴⁷ Dreyfus, "Merleau-Ponty and Recent Cognitive Science," 132. See also Dreyfus, "Intelligence Without Representation – Merleau-Ponty's Critique of Mental Representation: The Relevance of Phenomenology to Scientific Explanation."

¹⁴⁸ Johnson, *The Body in the Mind*, xxxvi.

PART 2

Momentum in Practice and Theory

CHAPTER 3

Analysis and/of Performance: Chopin Op.28, 1 & Brahms Op.119, 1

Music is what I am when I experience it.

- Thomas Clifton¹

An experimental hypothesis: Let music be defined by the experience of its performance. Let the description of that experience be called “music analysis” and its conceptualizing “music theory.” Let the following score be a set of instructions for making music, not music itself, a recipe, not a dish. Let us taste and talk of the dish. Let the following observations be an invitation to the experience they try to articulate.



Example 1. Chopin Op.28, 1, mm.1-4²

¹ Thomas Clifton, *Music as Heard: A Study in Applied Phenomenology* (New Haven: Yale University Press, 1983), 297.

Claudio Arrau³ consistently stresses the tenor line⁴ (i.e. G3-A3 in mm.1-3) by strongly accenting the first of those notes in each measure.⁵ This accent pushes one in the direction of hearing these as downbeats. Indeed, in some performances, for instance Jeanne-Marie Darré's,⁶ the measure is effectively shifted forward a triplet sixteenth for much of the piece, so that the bass notes (i.e. C2 in m.1, B1 in m.2) are heard as anacruses and the meter as a fairly normal triple, with G4 and A4 as beats 2 and 3. Allowing the last notes of each measure to linger over the following bass notes and softening the latter normalizes this triple feel further. It is precisely these two mutually reinforcing factors, treated oppositely by Arrau, that prevent his version from slipping into this triple feel, namely his sharp curtailing of the end of each measure, and the stress he gives each bass note. The former disallows what would be a proper third beat and the latter reasserts the low bass note as downbeat. The result is a rich metric ambiguity wherein the downbeat can shift both between the bass note and the first tenor note and everywhere in between, depending on, among other factors, those

² Frédéric Chopin, *Preludes, Op.28*, in *Friedrich Chopin's Werke, Band VI* (Leipzig: Breitkopf and Härtel, 1878): 1.

³ Claudio Arrau, *Claudio Arrau in Concert, Vol. 1: Chopin 24 Preludes Op. 28, Schumann Symphonic Etudes Op. 13*, recorded 1960, Appian APR 5631, 2001, compact disc.

⁴ My use of "tenor," "alto," and "bass" in this discussion is for registral-referential purposes and is not necessarily meant to imply a vocal quality.

⁵ I make no claims whatsoever about these performers' intentions. These authors are dead, in the Barthesian sense. I speak only of my experience with these sound recordings. If at times my language ("Arrau stresses, Sokolov suggests, etc.) appears to betray that stance, it is only to avoid cumbersome phrases like "It appears to me that something seems stressed here in Arrau's recording" etc. The focus is not on what a performer *tries* or *means* to do, but the effect that is created for me. It is not their experience I am trying to get at but mine.

⁶ Jeanne-Marie Darré, *Chopin: Preludes Op. 28, Fantasy in F minor, Op. 49, Berceuse Op. 57*, OVC-8092, 1995.

just outlined. It can be “in between” in at least two ways, what we might call “both” and “neither.” In the former, it acts as a kind of rubato, in the way a pianist or classical guitarist might separate the bass from melody for expressive or practical purposes. Somewhat paradoxically, though unproblematically, both notes are heard as “the downbeat” despite their temporal dissociation. In the latter, the downbeat is *somewhere* in the duration between bass and tenor but cannot be fixed.

This ambiguity and tension, a result of a complex web of melodic, durational, and accentual factors, opens up significant expressive possibilities, not least of which a keenly felt *agitato* as metric disquiet. In addition, because each measure can present any of the above options (i.e. bass as downbeat, tenor as downbeat, “both,” and “neither”) as well as shades thereof (e.g. “bass as slightly early downbeat,” “almost both,” etc.), patterns can emerge across consecutive and even non-consecutive iterations of the gesture. For example, in Arrau’s performance, m.1, because of the marked accent on G3 along with a fairly soft C2, leans more towards bass as anacrusis and tenor as downbeat. In m.2, the downbeat shifts slightly closer to the bass note, in m.3 slightly more, and by m.4 it is solidly on the downbeat. The bass thus “catches up” to the downbeat over the first four measures, and this progression shapes the opening 4 bars in several ways. As a tentatively completed process (i.e. the bass “caught up”, and Arrau’s suddenly loud E2 in m.4 enhances this feel), it lends a certain closure to this segment (or even identity *as* a segment): m.4 is felt as something of a goal, perhaps even as the resolution of a (now retroaural) metric ambiguity. This in turn teleologically shades the C5 in m.4: it is now something we *reach*, or, we might say, it is heard as a

locally culminating $\hat{8}$.⁷ This aspect of mm.1-4's shape and energy ramifies forward as well, and in ways that a different(ly shaped) mm.1-4 simply could not. Perhaps most palpably, as a 4-bar antecedent, specifically, *this* 4-bar antecedent, it affects what kind of consequent we will get, what mm.5-8 will be able to *do*, in what field of potential and expectation it will act.

All of the above pertains largely to just one aspect of how this motive moves. Of the many more, let us return to the issue of line. We can say more than "Arrau stresses the tenor line," for there are many types of stress and many types of line. For one, the metric variability influences its rhythmic articulation inversely to how the bass note is heard. Specifically, the first tenor note of each measure can be downbeat, second triplet sixteenth, and "in between" in the many ways outlined above. The differences among these possibilities are important, even constitutive. Simplifying somewhat and dealing with just two of these options, landing on the downbeat lends a certain stability to the line, whereas landing just after sharply syncopates it. A downbeat G3 and a syncopated G3 carry two different kinds of energies forward, affecting how they move to the second note (i.e. A3 in mm.1, 2, and 3, if indeed that is where they move) and consequently its relationship with that note. Simplifying again, the latter, catapulted by the syncopation, begs or depends on the second note (in the way syncopated notes often seem to seek a "landing") whereas the former, already rhythmically stable, moves more freely to the second note. We might say that the former G3 leans or leads more

⁷ To feel this, imagine (aurally) instead if Arrau had waited until m.5 to allow the bass to catch up, thus creating more of a 5 measure arc, at least in this parameter. Notice how the C5 now partly loses that sense of culmination. With m.5 as a kind of goal, the first four measures now together lead up to it. This in turn makes them a different kind of 4 measure group and antecedent, which of course affects the consequent, and the shape of the 8 measure phrase.

to the second note than the latter. These are not the same lines just metrically displaced, but different lines.

What happens to the right hand notes when the tenor line is stressed? For Arrau, though there is a fairly distinct upper line (i.e. G4-A4 in m.1, 2, and 3) from the outset, it is partly clouded by the flourish that wraps up each measure's gesture. To an extent, even the tenor A3 gets swept up in this flourish, partially connecting the tenor and alto lines in their joint culmination. As a result, the alto line is heard not so much as a kind of echo of the tenor line but as something that joins it. In this way, the lines, though also separate, are united in a single gesture, and one that becomes more distinct over mm.1-4).

The fairly sharp curtailment of m.1's gesture separates it somewhat from m.2's, affecting the relationship between m.1's A3/4 and m.2's G3. What might have been an upper neighbor figure is turned instead into a new kind of escape tone. That it resolves by step instead of leap, as the textbook definitions have it, does not detract from the sense of its having been "left hanging." As a result, measure 2 acts as a kind of "retaking" a "second attempt" of sorts. Measure 3's A3/4, on the other hand, connects more clearly with measure 4's B4, highlighting the $\hat{5}.\hat{6}.\hat{7}.\hat{8}$ ascent. In this regard, Arrau's first four measures work as a 2+2, with perhaps the first 2 acting as a kind of 1+1. Earlier argued for a sense of simply "4" due to the bass's "catching up" to the downbeat. But these seemingly conflicting accounts need not present a problem. Experience is multivalent, and each of these trajectories ramifies forward.

Like Arrau's, Ivo Pogorelich's⁸ motives play with metric ambiguity, but of a different sort, and with different causes and effects. Like Arrau, he curtails the gesture at the end of each measure, only more forcefully. This almost violent truncation (evidenced and emphasized by the audible pedal lifting in m.1 and 4), along with denying any triple feel, distinctly shapes this gesture, which bursts forth each measure only to be suddenly cut off at its dynamic peak. Unlike in Arrau, the tenor line is effectively inaudible as such—m.1's G3 is simply part of the arpeggio—and though the alto notes are more pronounced, they don't form a distinct line as much as they are subsumed by and within the unified gestalt of this explosive gesture. We hear the A4 at the end of mm.1-3 as a culmination of the entire upward sweeping gesture, not simply, or even at all, as the continuation of G4. That is to say that for Pogorelich, the primary work the alto notes do here is not linear or melodic as much as purely *energetic*, acting as a kind of ricochet of and in each gestural outburst. His gesture is tighter and shorter than Arrau's and most others, not only because of its speed, but because it has fewer distinct parts (e.g. less pronounced bass note, unpronounced tenor line, etc.). One of the effects of this shaping is to weight the gesture towards its end where it dynamically peaks and where the sudden, strong silencing of it confers a further, retroactive accent. Along with Pogorelich's relatively soft, unassertive bass notes, this forces the downbeat to fall somewhere between the bass note and the next triplet sixteenth. But this does not, like in Arrau, make the bass note sound like an anacrusis. Because of the way each gesture is hastily curtailed, almost interrupted by the next impatient gesture, the effect is still that of the bass note coming too soon, but not

⁸ Ivo Pogorelich, *Chopin: Preludes*, Deutsche Gramophone 429227, 1990, compact disc.

quantifiably early (as a specific kind of anacrusis), just vaguely, indeterminately early. If for Arrau the bass note chases down the downbeat, here it hastens it, eagerly overtaking it in each measure. This metric tension, the effect of the gesture breathlessly interrupting and overtaking itself is a key part of the energy Pogorelich imbues these measure with, ramifying forward in many ways, and lending a particular kind of *agitato* to his performance.

Another effect of Pogorelich's shaping is to connect A4 so tightly to the unified gesture that is it heard neither as upper neighbor nor escape tone to G4, but as essentially consonant. In other words, if for Arrau m.1 presents a C-major chord with a move to an non-harmonic tone, Pogorelich's performance erases that difference. There is no move away from an initial sonority. Rather, the sonority contains A4. His A4 is an added sixth (and in m.2, an added 9th).

Because of the way Pogorelich separates these tightly and fairly uniformly shaped gestures, and because its very energy seems to take precedence over a sense of line, there is a feeling of these first four measures as a kind of 1+1+1+1. This is not to say they are completely disconnected. Certainly we still feel the harmonic progression that links them. But they are not connected in ways that Arrau's is. Instead, there is a sense of a gesture, another gesture, one more, and a fourth.

If for Pogorelich the alto notes, subsumed by the larger gesture, do not become a distinct line, and for Arrau the tenor notes work as a line, then for Grigory Sokolov,⁹ not only do the alto notes become a line, but a distinctly melodic one. To be sure, this is aided by the slower tempo, softer volume, and register of the line (compared to

⁹ Grigory Sokolov, *Chopin Preludes Op. 28*, recorded 1990, Opus 111 30-290, 1999, compact disc.

Arrau), all of which are more conducive to hearing it as melody. But it is also that Sokolov allows the second alto note (A3 in m.1-3) to linger and so separates this voice from the activity below that, with the possible exception of m.1, we don't hear the tenor doubling A4 (m.1-3) or C4 (m.4). The liberties he takes with the lengths of both alto notes opens up expressive possibilities not present in either previous recording. Whereas in m.1 G4 is longer than A4 (roughly how it is scored), in m.2 and 3 they are equally long, and by m.4 C5 is perhaps even longer than B4, ringing well into the next measure. This is not to say that we hear durations empirically. What we hear in this case is a change in *weighting* between the notes, and thus a change in the meaning of their evolving relationship. Specifically, whereas in the first measure the brief A4 is subsidiary to G4, in the next two measures it acts more as a *continuation* of the G3, an equal partner. By m.4, B4 is very much subsidiary to C5. This in turn brings out the line G4-A4-B4-C5 (mm.3-4), as a connected ascent, whereas in many other recordings (e.g. Pogorelich) the B4-C5 acts more as the "next" or "fourth" motivic dyad. Alternatively stated, the even weight Sokolov gives the A4 in m.3 allows a stronger, melodic connection to arise with m.4's B4, bringing to the fore the line from G4 to C5 and with it perhaps a feeling of 2+2 for the first four measures. Though we can say more than "2+2," for there are many ways 2+2 can work. In this case there is sense of introduction to the first two bars—a somewhat tentative "ramping up"—followed by the first real push forward. This is generated by a fairly sudden loudening and then crescendo in m.3-4, which lends an intensity to m.3's G4-A4 and a retroaural calmness to those of m.1-2. And yet, because the rhythm and shape of m.2 and m.3 are so similar, there's an undeniable continuity, further aided by the E3-F3-E3 line which connects m.2's V⁷ to m.3's I. (In many other recordings where there is more of a

separation between these harmonies, this is not the case. Instead, there is a sense that m.3 is a “second” m.1 and not necessarily a resolution of V^7 , making that dominant point more backward than forward.) In short, there are ways in which Sokolov’s mm.1-4 works as 2+2 and others in which it works as 4. But this is not a problem as much as a source of complexity.

While Arrau and Pogorelich present a more or less unified, coalesced (if not fixed) motive from the beginning, Sokolov’s dramatic “ramp-up” (i.e. the typical acceleration that begins phrases) has the effect of presenting a gestural *emergence*. Alternatively stated, while all three performances start more slowly than they eventually become, Sokolov’s goes beyond a simple acceleration—where we here essentially the same gesture only climbing to normative speed—to show the gesture *in formation*. It is not only his more exaggerated “ramp-up” but the particular way he introduces the motive in the first measures, that suggests this *becoming*. After a quiet opening C2, he rolls the octave G’s, the relatively pronounced E3 flowing therefrom. Out of this largely unmetered arpeggio—it is unclear at the outset if it is in fact an arpeggio or a broken chord—emerges the G4-A4 melody. In other words, the effect of Sokolov’s fairly free playing of the opening notes is to create not a solid accompanimental figure but a more impressionistic milieu out of which a melody arises. It is not until a few measures in that the motive, the relationship among its parts, solidifies. Namely, the arpeggio tightens and becomes regular, if not exactly discernible, so that that the gesture is essentially in three parts (arpeggio-alto note-alto note), possibly even heard in three. Hence the suggestion of a motivic *coming-into-being*.

Metrically, Sokolov’s relatively amorphous first measure denies a clear grouping, but the equal weighting of alto notes in m.2-4 suggests more of a triple feel (like

Darré's), with the bass note as beat 1 and the alto notes as beats 2 and 3. This almost waltz-like feel and the emerging separation between arpeggiated accompaniment and melody enables, or is simply part of, Sokolov's distinctly song-like rendition

These three performances realize their motives differently in nearly every way. The same notes are imbued with varying energies, disparate internal and intra-motive relationships, divergent metric feels, etc. and are thus not at all the same notes. If motive *is* as motive *does*, these motives are simply different motives (or, at the very least they are *motivated* differently). As I have demonstrated, these differences are not relegated to its local shape, though that is already significant, but ramify forward in countless ways, affecting the entire piece.



Example 2. Brahms Op.119, no.1, mm.1-8¹⁰

¹⁰ Johannes Brahms, *Vier Klavierstücke Op.119*, in *Johannes Brahms: Sämtliche Werke, Band 14* (Leipzig: Breitkopf and Härtel, 1926-77): 163.

The famous ambiguity of this passage arises, I would argue, only as a result of an entrenched score-based approach. Depending on how an analyst circles it, cuts it up, connects the dots, he or she gets different structures.¹¹ Yet if we abandon the assumption of textual authority and take performance as constitutive, not only does textual ambiguity dissolve into performance possibilities, but those possibilities, as actualized in performance, are more complex and subtle than a theoretically-driven segmentation allows for. To say that the descending thirds “conceal underlying root progressions by fifth” is to offer a solution perhaps to a question of compositional design, not necessarily one of music as heard.¹² This is not to deny a relationship between the score and the sound, but rather to emphasize that they are distinct phenomena, and that their relationship is not necessarily evident.

Thus the passage above is not necessarily more “ambiguous” than the Chopin before it, even though from a textual-analytical standpoint the latter submits more readily to harmonic parsing. Granted, the falling thirds introduce a certain harmonic indistinctness, but no greater than the metric indistinctness of the Chopin. In both cases, as in all cases, performers and listeners try to make musical sense of what they are given. Therefore the task here is no different from any other passage, namely to try to faithfully describe that sense and its making.

¹¹ See, e.g., Candace Brower, “Paradoxes of Pitch Space,” *Music Analysis* 27, no. 1 (2008): 87–91.

¹² Steven Rings, “The Learned Self: Artifice in Brahms’s Late Intermezzi,” in *Expressive Intersections in Brahms: Essays in Analysis and Meaning*, ed. Heather Platt and Peter H. Smith (Bloomington: Indiana University Press, 2011), 36.

Markus Groh,¹³ like many others, highlights the opening F#5 with both volume and extended duration, though of course neither can be felt until mid-measure when its differences from the ensuing notes become apparent. To an extent, then, he separates that soprano line from the rest, ringing the F#5 across the measure so it may connect more clearly with the A5 and G5 that follow. Though this general tack is very common, the particular effect of Groh's move is not. Because of the relatively slow tempo, the deliberate way each successive note is sounded (which together nearly turn them into individual beats), the F#5 gets "faceted," reoriented, as its context slowly unfolds. Most prominently, as the G4 and E4 appear, the opening F#5 and the D5 soften, both individually and as dyad. Perhaps this is simply the effect of a b minor chord (F#5-D5-B4) becoming first a G-major-7 chord (with G4) and then an E-minor-9 chord (with E4), in other words, the F#5 changing from a sterner perfect 5th to a lighter major-7th and major-9th (and similarly for the D4 which becomes a minor 7th against E4). This is logical enough but I would argue ultimately unsatisfying phenomenologically, as it mistakes the felt experience for a quasi-information processing account, the truly temporal for the simply linear. We do hear, in Groh and some others, the change of the F#5 and D5, but it is less distinct, and also more specific, than "G-major-7," and "E-minor-9," let alone "E-minor-11." It seems to me that what we hear primarily are not particular chords, but precisely this softening of F#5 and D5, and with it a *motivating* of those notes, as light, slightly vague dissonances, to move to resolutions. It is this faceting, its causes and effect that takes center stage here, and is a part of how Groh sets up a quasi-progression in the first two measures.

¹³ Markus Groh, *Johannes Brahms: The Late Piano Pieces Op. 116, Op. 117, Op. 118, Op. 119*, Avie 2136, 2008, compact disc.

Groh's F#5 clearly goes to the A5, which is even slightly more stressed. But what is A5's relationship to the ensuing G5? In many performances, A5 acts an anacrusis to G5, making it more a part of m.2 than m.1 (e.g. Julius Katchen's, below). Groh, by contrast, highlights the F#5-A5 connection slightly more than the A5-G5 one, downplaying it as anacrusis, as belonging to the next measure. He does this by holding onto A5, inserting a mini hesitation between m.1 and m.2. As we will see below, this shaping of the upper line is one of the elements that allows him to fashion a V-I motion at the end of m.2. In other words, only by establishing this pattern—i.e. F#5-A5 and G5-F#5 as somewhat separated figures—can the F# at the end of m.2 be independent enough to sound like an arrival. If the anacrusis figure predominates—i.e. A5-G5 (mm.1-2) and F#5-C#5 (mm.2-3)—the possibilities of suggesting a V-I in m.2 are lessened, if not completely denied (as we will see with Katchen).

If A5's linear meaning is fairly clear, its harmonic/intervallic one is not. To wit, is A5 consonant or dissonant? Answering this question—not by dint of abstract theoretical commitment but by attending to its sound—reveals much about how a performance shapes mm.1-2, not least of which the harmonic implications, if any.¹⁴

¹⁴ Though, as with so many events I describe as “effects of” or “results of”, whether explicitly or not, it works conversely at the same time. Specifically, the way A5 is played affects how the rest of measure 1 is heard just as the way measure 1 takes shape affects how A5 can be heard. Just because A5 occurs after the first few notes does not necessarily mean it has less determining power. It is not as if the meaning of the first notes is completely determined and then A5 appears. Rather, the appearance of A5 helps determine the meaning of the first few notes, just as the latter helps determine the former. In a sense this happens at precisely the same moment—a co-determination (though here let us have “determine” not imply exhaustiveness or finality). Causation in this sense is mutual, reciprocal. It is perhaps only the exigencies of language, the habits of thought, and an impoverished notion of temporality that have us speak as if cause and effect were sharply distinguishable things whose relationship is one-directional. This may be true in physics, but in (musical) experience, effects create causes as much as causes create effects. By “create” I do not mean “bring into existence” in the strict sense, but something like “confer identity upon,” “specify,” or simply “identify” (in this new

For Groh, despite the faceting of F#5 into a light dissonance against a somewhat inchoate E-minor, there is a sense that this is a leap from the 5th to the 7th of B-minor, meaning there remains a feeling of B-minor throughout measure 1.¹⁵ This does not necessarily contradict its transformation into an E-minor-9 chord (or a vague predominant with dissonances). As emphasized above, that transformation is only partial—it is an affordance taken on in measure 1, but not the only one. What forms in measure 1 is both a tentative B-minor and E-minor chord but also neither. All of these meanings, or affordances, are carried forward as potentialities, which can then be seized upon variously by ensuing events.¹⁶ This rich ambiguity is afforded by Brahms’s unfolding of thirds, which flowers in harmonic availability, and of course Groh’s realization. It is the B-minor affordance, that aspect of measure 1’s meaning, that makes A5 sound like its 7th. Its relationship to the E-minor affordance is less clear, for though it is not heard as an 11th of that chord, it still is heard in relation to at least the E3 itself. Its relationship is intervallic if not harmonic. In fact, the way A5 partly denies E-minor is partly responsible for the latter half of measure 1 not completely becoming E-minor. And at the same time the suggestion of E-minor prevents B-minor from ever fully establishing itself. These tensions result in the multiple affordances under discussion. A third prenominate affordance is “neither,” i.e. in yet another sense, measure 1 is heard as a series of thirds, *tout court*. To this extent, A5 is the

sense). Thus a cause does not become a cause until its effect evidences it as such. In this way it “identifies” the cause. It crystallizes it as such, thus “creating” it.

¹⁵ Replay Groh’s performance (actually or in imagination), stopping at A5, and feel where it wants to resolve. Notice how it has that particular feel of a minor chord’s 7th. `

¹⁶ This is an advantage of thinking in terms of “faceting,” with its implication of multiple, co-existing, perhaps related, aspects of a single entity or event.

upward extension of this series following its opening descent, thus in an important sense, “consonant” in this context.

Returning to the question of A5’s dissonance/consonance, we can now say that it is both, given we reformulate the meanings of the terms. It is dissonant in two senses: as a 7th of a tentative B-minor (a dissonant note but within the consonance of a chord) and as a vaguely tense interval against E3. It is simultaneously consonant as another third in a sonic milieu of thirds and as part of the unified B-minor-7th sonority. All of these aspects make up A5 and contradiction results only if the theoretical question of its *identity* is thought of as an either/or problem in need of a definitive resolution. But experience is large; it contains multitudes. What might be a contradiction in theory is simply experiential multiplicity.

Groh’s stress of G5 imbues it with a relative urgency and, more globally, lends an insistence to measure 2, perhaps as a “retaking” of measure 1. His launch of G5 (aided by the slight delay after A5, as if coiling, winding up) helps *activate, mobilize* the emerging dominant-7th (G5-E5-C#5-A4). At some point during this emergence (probably with the introduction of the C#5, but certainly by A5), G5 *becomes* a 7th, having not started as one. Carrying forward the affordance of B-minor-7 in measure 1, G5 (and the ensuing E5) sounds like the beginning of a iv-chord, a fairly typical opening move. Somehow it does not carry forward the E-minor-7 affordance as a continuation of sorts, perhaps because of the interruptive A5.¹⁷ However it begins, by mid-measure it more or less crystallizes as a dominant-7th, with the prominent 7th (G5) leaning towards resolution. We do not get the hint of a D-major resolution until F#4,

¹⁷ Note also that although the “thirds, *tout court*” affordance, though still present in mm.2-3, is quieted as the dominant asserts itself.

which in turn suspends G5 (not as a 9-8 but a 4-3 suspension over the implied D-major), adding even more gravity to it for an instant before it resolves to F#5 over D4. Groh's slight *ritard* on F#4 and D4 allows this to feel like a resting point, however temporary. As such it plays a crucial role in allowing it to sound like a progression at all. Yet that resolution, that cadence, and even, by extension, the whole progression have an air of provisionality, tentativeness. In the familiar punctuation terms, this is not a period or even a semicolon, but a kind of comma. Several factors contribute to this effect, most prominently its metric weakness, brevity, and Groh's soft playing, all rendering it almost parenthetical. And although it is not heard distinctly, the sustained E5 and C#5 add haziness to the cadence. But it is also the provisionality and tentativeness of the progression itself, the way the first measure remains somewhat vague and indistinct, and the way harmonies emerge faintly rather than announce themselves.

Hence the root motion by fifth, at least in mm.1-2. Though I hope to have shown how inadequate that label alone is in the face of this complexity.

Groh's fashioning of this progression out of mm.1-2 ramifies forward and backward. For one, it makes a segment of sorts out of mm.1-2, albeit only a semi-solid one, given the tentativeness described above. Measure 3 thus has the opportunity to be a semi-beginning, to start something new and respond to *this* past. And this is precisely how C#5 partly works, thanks also in part to the accent it gets. "Partly" for two reasons: Groh holds onto measure 2's D4 across the bar line so that for an instant it is heard along with C#5, and although measure 2's F#5 is in many ways effectively separated from the ensuing C#5, they are still aurally continuous. These factors liaise

between the “progression” of mm.1-2 and m.3, underscoring the provisionality of the progression by making its border fluid, and making m.3 only a semi-beginning.

Given the pattern of descending thirds established by mm. 1 and 2, m.3 is quickly heard as an iteration thereof, perhaps at first as a sequencing of the entire mm.1-2 group (i.e. there is a projection of mm.3-4 for an instant). This is yet another ramification of *Groh's* mm.1-2. Though technically (i.e. purely notationally) it turns out to be an imitation of m.2, for several reasons it is for the most part not heard as such. Whereas m.2's harmonic directionality was instigated by G5's becoming a tritone (with C#5) and then also a 7th of a dominant (A), m.3's C#5, as a (major) major 7th (D4) (or a perfect fifth, if it is heard first in reference to F#4), has hardly the same pointing potential.¹⁸ Additionally, *Groh's* shaping of the end of the measure and its continuation into m.4 shades what might be an implied G-major chord strongly toward a first inversion E-minor. With the G-major chord affordance already downplayed by the lack of a referential dominant, *Groh's* connecting of the G3-B4 dyad with the ensuing E5—accomplished both by allowing the dyad to ring into m.4 (so one hears a full E-minor⁶) and turning B4 into an anacrusis to E5, itself accomplished with a crescendo beginning on the dyad—further denies G-major in favor of E-minor⁶. The same factors—the sustaining of the dyad and the crescendo—creates a metric hiccup, so that for an instant the G3-B4 dyad sounds slightly like a downbeat against which E5 is thrown into syncopation. This effect is afforded by Brahms's “waiting” a sixteenth to introduce C#3 rather than having it land on, and assure it as, the downbeat of m.4. The suggestion of G3-B4 as a downbeat is also amplified by C#3's arrival on the

¹⁸ If we rewrite C#5 as C5, m.3 almost surely becomes an imitation of m.2 with parallel V-I movement.

second sixteenth, which, along with G4-B4, make for what sounds like a strong beat. It is not until the next sixteenth, with the arrival of an undeniable, agogically grounding $V^{6/4}$ that accentual regularity is restored.¹⁹

Groh's crescendo into the $V^{6/4}$, his firm announcement of a true bass line—notice how C#3 feels like the introduction of a new voice, not a continuation of m.3's G3—resolutely steers what was so far a somewhat vague and ethereal harmonic milieu towards an unambiguous, conventional cadence. C#3 even comes early, preceding G4-B4 by an instant in its eagerness. The difference in character between mm.1-3 (minus the last sixteenth) and m.4 (plus the previous sixteenth), along with the crescendo and increased harmonic and melodic activity that shapes the latter, is such that m.4 is nearly interruptive. The minor cadence retroaurally confirms mm.3-4's E-minor⁶ (as iv^6 in B-minor), normalizing the progression $iv^6 - ii^{\circ 7} - V^{6/4}$, and also makes sense of Groh's starting the crescendo on the G3-B4 dyad, thereby bringing out this larger progression. The decisive drive towards a B-minor cadence may even retroaurally cast a minor shadow on mm.1-4, perhaps partially resolving the potential modal ambiguity ("it was minor all along"). Then again, and at the same time, the way m.4 clashes with mm.1-3, almost overrules it, suggests a tension between them, possibly casting mm.1-2 (and 3?) as contrastingly major. In this way, mm.1-4 has the feel of 3+1. Groh's creation of the progression out of mm.1-2, however, suggests 2+2. Both are suggested and carried forward.

¹⁹ I want to stress that it is not the case that the temporary metric upsetting is "corrected" by the return to the normative stress pattern, "revised" so that it is now understood as a "mistaken impression." That momentary ambiguity is a positive phenomenon.

Sviatoslav Richter²⁰ opens much the way Groh does, with an accented F#5, a quieter descent underneath, and a “one-note-at-a-time,” moderate tempo. His almost startling F#5 is even more pronounced than Groh’s, sounding like a bell across the measure and over its trail of thirds. Surprising, then, that the same kind of faceting does not happen to his F#5 (and D5). Instead of the softening of Groh’s F#5, Richter’s F#5 is less affected by its emerging harmonic context, partly due to the almost insistent independence its attack and relative volume lend it. Perhaps most importantly, Richter holds the pedal through each measure, resulting in an almost atonal sonic residue. Whatever the cause(s), the effect is significant. For whereas Groh’s faceting of F#5 catalyzes the progression he makes out of mm.1-2, Richter’s shaping to an extent denies that affordance. This is not to say that F#5 is not heard at all as a 7th or 9th, only that that impression is faint, not primary like in Groh. This is also not to say that a progression is necessarily precluded—Richter does in fact fashion a faint V-I in m.2—only that it will necessarily have a different shape and energy than Groh’s.

The descent in m.1, after the slightly stretched F#5, is almost mechanically even, and the sustain of each note is made more salient by the pedal. Along with the unhurried tempo, these aspects yield a homogenous, misty cascade. That Richter allows it to sustain well into the next measure not only further negates the affordance of a distinct chordal change (predominant-7th to V⁷), but gives the impression of one hazy cascade *supplanting* another. Additionally, the evenness of Richter’s playing to an extent subdues harmonic directionality.

²⁰ Sviatoslav Richter, *Out of the Later Years, Vol. 1*, recorded 1991-93, Live Classics LCL471, 1997, compact disc.

And yet, the implication of a dominant harmony persists—the outlining of the tritone G5-C#5 is too strong to deny, though it has hardly the same pull or indexical salience as Groh's. Though Richter's G5 rings across the measure, it gets lost in the mist, suddenly relegated to the background just after E5's onset. (Groh's G5, by contrast, is catapulted across the measure, never losing its primacy.) Richter's subtle *ritard* and *diminuendo* on the last sixteenth of the measure, however, manages to call attention to G5's resolution to F#5 over D4.²¹ There is doubtless some kind of harmonic arrival, but for several reasons it is not as assertive or clear as Groh's. Most prominently, Richter audibly sustains E5 and C#5 well into m.3, providing not only harmonic counterindication but undermining the moment's punctuation as a harmonic arrival. More broadly, the mist Richter creates in m.2, by now established as a motive in its own right,²² again sustains halfway through the next measure, weakening the cadence as a point of arrival. Richter's connecting of the F#5 with the ensuing C#5 further undercuts the cadence. While C#5 receives a renewed attack, implying its commencing of something new, the anacrusis-downbeat figure is undeniable. Thus Richter also downplays a clear mm.1-2 segmentation in favor of a more fluid, motivically rather than harmonically driven, grouping of mm.1-3.

²¹ Notice how Richter's arrival on D-major happens on beat 3.5 of m.2, while Groh's occurs on beat 3. While Groh's F#4 implies a D major arrival over which G5 is momentarily suspended (as a 4-3 over an implied D), Richter's F#4 belongs instead to the vaguely dominant harmonic mist of m.2, though more nebulously than as a 13th. So it is not until the last sixteenth of the measure, with F#5-D4, that D-major is suggested. Richter's G5 is not suspended. That his resolution occurs on the last sixteenth, as if an afterthought, makes it weaker than Groh's, whose entire measure 2 moves towards a more clearly announced D major.

²² In other words, Richter fashions a motivic event out of these descending thirds and one whose distinct rhythm can be felt. Specifically, as the mist emerges halfway through each measure and fades halfway through the next, it cuts across the measures, perhaps even generating a shadow meter behind the more obvious one.

Enhancing that feel, measure 3 proceeds, as the two before it, steadily and evenly. The dynamic envelope is familiar. C#'s attack is enough to separate it harmonically from the D major suggestion at the end of m.2 (perhaps implying iii for the first half of m.3), though the harmonic mist of m.2 remains until around F#4, meaning both dominant (E5, C#5, A4) and tonic (A4, F#5, D4) shadows persist behind m.3's C#5 and A4. Harmonically, the opening of m.3 is a richly ambiguous juncture.

Much like in Groh, what at first appears to be a 4-3 suspension over a G chord on the last sixteenth of m.3, is quickly recontextualized, thanks to the connecting E5 of the next measure, as more likely E minor in first inversion. The connection with E5 produces a similar metric hiccup, where for a moment G3-B4 feels like a downbeat. If the effects are similar, their causes are different. Whereas Groh pounces on the B4 and E5, creating a sudden change in register, texture, and harmonic clarity and rhythm, Richter naturalizes it, making it proceed more smoothly from mm.1-3. This move is of a piece with Richter's overall steadiness and regularity. Groh's interruption is Richter's continuation. As a result, Richter's C#3 and F#3 in m.4 are felt to come from m.3's G3, creating the line G3-C#3-F#3-E3-D3-G3 etc., making m.4's C#3, played softly, somewhat subordinate to the following F#3. In contrast, Groh's unmistakable stress on C#3, both loud and early, announces it as a new line in a new register, suggesting C#3-F#3-E3-D3 as the operative line (perhaps even as an overlapping imitation of the soprano's B4-E5-D5-C#5 in mm.3-4).

Though both performances grow louder in the fourth measure, underlining the sense of cadential arrival, the types of arrival and cadence they achieve differ substantially, owing proximately to their shaping of the second half of the measure into the downbeat of m.5, and globally to their harnessing of the musical energy up to that

point. Richter sustains the crescendo through to m.5's downbeat (i.e. the arrival on i^6), in fact hastening the last two beats of m.4. Though the immediate or obvious goal of this buildup is the downbeat of m.5, the extended follow-through of the climax is such as to encompass beats two and even three of the measure. One effect of this is the suggestion of an "overshoot," that the energy of the cadential approach and arrival was so great as to propel the music beyond the tonic to VI.²³ The ramifications of this move for the shaping and segmentation of mm.5-8, both in themselves and in relation to mm.1-4, will be considered below.

Groh does not crescendo through m.4 as much as he abruptly changes volume, beginning with the B4 of m.3. This new dynamic plateau sustains through beat 2 of m.4 as Groh *ritard*s. Slowing down in the midst of this dynamic intensification at first only amplifies the goal-directedness. But this is short-lived, as Groh decrescendoes on beat 3, to a degree putting the brakes on the teleological march. This slightly deceptive dynamic move highlights the coincident slightly deceptive harmonic move from $V^{6/4}$ to $V^{4/2}$. As if pulling, even shying, away from that initial drive, there is a sense of resignation to Groh's quiet arrival on i^6 , emphasized by the marked hesitation before reaching the downbeat of m.5. His move to the still quieter G-major chord on beat 2 still acts as a kind of perpetuation of the cadence—given the patent elision and quick harmonic change, it is difficult not to hear it as part of the cadence²⁴—though not, like in Richter, as spillover energy, but as an afterthought.

²³ One could imagine that if Richter had not decrescendoes slightly after the first beat of m.5, the arrival, the goal, could indeed have been the G chord on beat 2 (and/or 3, depending on how it's heard).

²⁴ The move to VI, which gets the weight of syncopation and duration, can almost make the cadence sound deceptive (in the textbook sense), as if the i^6 were parenthetical. This is truer

Groh's and Richter's substantially divergent, in some ways opposite, treatments of this phrasal hinge create substantially divergent senses of how the phrases (i.e. mm.1-4 and 5-8) work and relate to each other, and even what the phrases are. Given Brahms's overlap of thematic and phrasal groupings—that is, m.4 harmonically culminates a four-measure phrase while simultaneously beginning a two-measure sequence (mm.4-5, 6-7)—this juncture is particularly consequential. Richter's insistent drive right through the cadence highlights the mm.4-5 pair. The sudden loudening and quickening of m.4, especially sudden after the almost mechanically even mm.1-3, further establishes it as a beginning even more than an ending. Groh's sudden loudening and quickening in m.4 sets up a similar possibility, but his easing off on the last beat of that measure to some degree upsets it. Despite his resigned subduing of the cadential decisiveness—and in a way, because of it—measure 5 becomes something new, a beginning. This is not to say that Groh denies the mm.4-5, mm.6-7 grouping (he does it in his own way, see below), only that at first the mm.1-4, mm.5-(8?) segmentation predominates. It is only by mm.6-7 that this new segmentation becomes clearer and retroaurally solidifies mm.4-5 as a connected figure. Richter, in contrast, highlights the mm.4-5 connection as it happens.

Richter's driving through m.4 into m.5, the sureness of his advance, downplays the m.4/5 (and mm.1-4/5-8) boundary and the affordance for contrapuntal and melodic deception at the cadence. His decisiveness confers an inevitability on this move,

in Groh, due to the quiet, resigned i^6 , than in Richter, for whom the i^6 is a more decisive arrival. In this way—by downplaying the i^6 as arrival—Groh, we might say, creates a cadence that is both authentic *and* deceptive. It goes to i *and* VI.

overshadowing, if not eliminating, the potential for surprise or upset expectation. One does not even sense that A#4 was hanging, whereas in Groh that lack is made palpable.

Perhaps the most prominent difference between these two performances and that of Julius Katchen²⁵ is tempo. Tempo differences alone, however, can generate fundamentally different music, not just the “same piece” sped up or slowed down. Motives, lines, progressions, and phrases coalesce in different ways, on different scales, depending on their pace, a simple example being how to how a quick enough $\frac{3}{4}$ can begin to sound as if “in 1.” But it is not just groupings that change in relation to speed, though that is already significant, but the very nature of the groups’ content. Simplifying and generalizing considerably, in the first few measures of the Brahms, at slower speeds, like Richter’s, there is a one-note-at-a-time feel, a sense that the tactus might even be each sixteenth note. This allows each note to *go to* the next: F#5 moves to D5 and then to B4 etc., despite their sustains. To an extent, it is heard as a line as well as an arpeggiated chord. Or rather, we can suppose a continuum between line and arpeggiated chord, with slower performances leaning more towards line (at least at the outset). At faster speeds, like Katchen’s, we now have “and”s between beats, which, along with the sheer pace, stresses the arpeggiated chord effect and effectively denies the possibility of linear movement between notes. F#5 begins to float above its arpeggiated tail. And because the measures are simply shorter, it can connect more vividly to A5 and the ensuing G5. This is not to deny the presence of that larger line for slower tempi—certainly both Groh and Richter vivify it—just its relative prominence and availability. It should come as no surprise that larger spans and

²⁵ Julius Katchen, *Brahms: Works for Solo Piano*, Recorded 1962, London/Decca 430053-2, 1990, compact disc.

connections are afforded more when they span less time and, conversely, that certain shorter-range phenomena are made less realizable. One of these appears to be the intimation of harmonic change. In other words, because of the harmonic indistinctness of mm.1-2, it may simply require time for harmonic areas to begin to coalesce out of the relatively undifferentiated milieu.

Though generally quicker, Katchen's tempo is somewhat elusive at first. Notice the lilt established in measure 1, most prominently the E4, which seems to come early, almost cutting off the G4. One effect of this unevenness is to draw a different kind of attention to the sixteenth note level, which has been made less stable (or more dynamic) than it typically is. Whereas in most performances the cascading sixteenth notes are fairly regular—even if accelerating or decelerating, they still act as a consistent rhythmic/metric underpinning—Katchen's surprises to upset this predictability. Thus measure 2, played fairly even, *feels* even, almost a corrective to or stabilization of m.1's irregularity. Yet m.3 resumes the lilting, almost swung sixteenth note feel. Measure 4 again feels straight, or straightened out, as it marches towards the grounding cadence. Though subtle, this rhythmic flexibility, the play between straight and almost swung sixteenth notes, suggests a new 2+2 pattern, mm.2 and 4 responding to the elasticity of mm.1 and 3. Another effect of Katchen's rhythm is to differentiate the cascades of mm.1 and 2 in a unique way. Measure 1 has five descending thirds and measure 2 six, yet Katchen's playing—specifically the even F#4 and D4 of m.2 now *contrasted with* or *responding* to the curtailed G4 into E4 of m.1—makes palpable that lengthening, that “extra” sixteenth. Measure 2 now gains a sense of extension, perhaps even answering a question posed by m.1.

More locally, m.1's early, almost interjecting E4 promotes itself as it demotes the truncated G4. Syncopated or lilting pairs of notes tend to add weight to the first of the pair, not only because it is longer, but because of the way the shortened note trips into the next extended one, *making* it strong. This local weak-strong pattern affects grouping, character, and even harmonic implications. Measure 3's lilt draws attention to C#5, F#4, and B3 even more than a straight rendition would. Katchen's lilt here is light, playful, even song-like, intensifying by contrast measure 4's determined cadential drive.

Katchen's upper line, unlike Groh's, is characterized by an anacrusis gesture. His F#5 does not go to A5 as much as A5 leads to, or trips into the ensuing G5. Similarly, while G5, ringing across the measure, certainly falls, if not resolves, to F#5, the more salient connection is between that F#5, as anacrusis, begging m.3's C#5. The B4-E5 figure of mm.3-4 then comes as no surprise, whereas in other performances that connect it in this way—specifically those whose upper lines more directly connect F#5 to A5 and G5 to F#5 etc.—it shows up as a new rhythmic idea. This articulation of the line helps deny the harmonic implications realized in Groh, or even Richter. In particular, the potential for a quasi-cadence on D at the end of measure 2 is all but precluded by the prominence of the F#5-C#5 pickup-downbeat figure, which pulls attention away from the potential moment of resolution and toward the ensuing downbeat. Katchen's lingering on D4 into m.3 also connects F#5 to C#3 and m.2 to m.3. Groh's and Richter's realizations of varying degrees of cadence is enabled, in part, by their marked pauses near the end of m.2, which slightly separate it from m.3. The metrically weak third beat of m.2 is thereby lent enough weight to support such a

harmonic move. Katchen's m.2, on the contrary, moves assuredly to m.3. His F#5 belongs more to m.3 than m.2.

If Katchen does not achieve the kind of progression and cadence that Groh and, to a lesser extent, Richter does, neither does he altogether avoid harmonic implications. Harmonic availability here is on a continuum. If for Groh the first two measures faintly suggest two harmonies in each, Katchen's more or less cohere as single entities. His E4 is more a part of the entire cascade of m.1 than Groh's, which signals a nebulous chordal transition, a *second* thing, even an opposing thing. And even more so for m.2, which in Groh and, to a lesser extent, Richter vaguely splits into V and I. If there is an opposition in Katchen, it is *between* rather than *within* m.1 and m.2. Measure 2, already a *second* thing, an answer to m.1 responds to m.1 harmonically/intervally as well..

Katchen's descending thirds establish a logic of their own, an appreciable pattern that needs no further context or explanation. To an extent Katchen makes the entire cascade consonant. Because Katchen's A5 acts more as a pickup to m.2 than a continuation of F#5, the larger move from m.1's F#5 to m.2's G5 predominates. Measure 2's thirds thus feels higher than m.1's, upping its ante as it were, but also, with its return to F#5 (felt as a return here more than in Groh and Richter, where it is primarily heard in the context of D major) and its F#4-D4 (responding to E4), concluding the response to an extent, intervallically if not harmonically. The second cascade encompasses the first: measure 2 comes *over the top* of m.1 (with A5-G5) and also closes it by going underneath with F#4-D4. Measure 3 then performs triple duty: it is a *third* thing, a *second second* thing, given its parallelism with m.2, and more faintly, the potential beginning of a *second* mm.1-2. Heading into m.4, then, there are at least

three grouping trajectories: 1+1+1, and 1+2, and 2+1 (of 2?), of which the latter is weakest. In contrast, notice how Groh's cadence at the end of m.2 effectively precludes the first two of these in favor of the third, though that simplistic label belies crucial differences in that general segmentation's genesis, character, and projective potential between the two performances. These are not the same "2+1"s. If for no other reason, they carry different energies forward because of the very presence of the other grouping potentials and their relative pulls. A 2+1 shaded by a 1+2 is already different than a fairly similar 2+1 shaded by 1+1+1. Even two similar 2+1's each shaded by 1+1+1's can differ substantially depending on the kind of 1+1+1, the ways it interacts with the 2+1, and the relative weights of the two groupings in question. Katchen's and Groh's grouping trajectories diverge also because of the type of "2" they fashion. Whereas Groh is largely the result of the progression he intimates, Katchen's arises from the various ways m.2 responds to m.1, as described above. More simply, Groh's is harmonic while Katchen's is intervallic. Additionally, Groh's "2" implies a sub-segmentation of (1+1) + (1+1) due to the harmonic bifurcation described above, while Katchen's 1's come across as indivisible. In all the ways they differ as "2"s they project different "2"s. They move forward with different pasts.

Katchen's melody is set apart by and stressed with volume (and duration for the opening F#5) but is also simply more prominent as a result of his quicker tempo. Even with all the interest and subtlety in his deployment of the sixteenth-note trails, that activity is still subsidiary to the upper line (they are still "trails"), which drives the phrase. Not only does the melody connect more saliently, but relationships between sixteenth notes across measures become more conspicuous. Measure 2's F#4-D4 more clearly responds to m.1's E4. Granted, this is also aided by E4's distinction and the

resulting sense of m.2's extension, as discussed above. But their sheer proximity also makes the link across these measures more palpable, simply more audible.

In m.4, Katchen drives through the cadential approach beginning with the lower line's C#3. Indeed, that line's appearance seems to spur the crescendo and *accelerando* of beats 1.5 through 3.5. (It is specifically *that* line, not the upper G4-B4, which remain fairly quiet.) Though mm.1-3 are relatively quick and the tripping quality of the line slightly propulsive, they are nonetheless light, allowing m.4's initial push to stand out in contrast, perhaps even come as a surprise (though not as much as Groh's). Unlike both Groh's and Richter's, Katchen's E5 sounds like a downbeat—i.e. there is no metric hiccup or sense of syncopation—for two reasons: he does not emphasize the G3-B4 dyad on the last sixteenth of the bar and the anacrusis-downbeat figure has already been established. In Groh and Richter, the newness of the pickup figure, along with their stress on G3-B4 throws E4 into syncopation. Katchen keeps the middle voices in the background in m.4, unlike Groh and Richter, who dip into some of the repeating B4's to suggest a compound melody, both suggesting B4-E5-B4-D-C#. If only in terms of their constituting notes, these lines diverge. Though the difference is slight, Groh's and Richter's version creates a greater melodic rhythm acceleration (along with the harmonic rhythm one) toward the cadence, also connecting the pickup B4 with the subsequent B4's. As neither performance makes a motive out of the pickup-downbeat possibility in mm.2-3 or mm.3-4, this perhaps makes sense of the new figure by contextualizing it as the beginning of a compound melody. For Katchen, on the other hand, that figure has already been firmly established.

Katchen's C#3-G4-B4 triad on beat 1.5 is technically slightly late, but feels perfectly consistent with the lilting that has suffused mm.1 and especially 3. It follows

directly from the swung beat 3 of m.2. Here it intensifies the landing on $V^{6/4}$, which arrives early. Together with the “late” C#2, this makes beat 1.5 especially quick, further stressing the cadential 6/4 arrival. The move to $V^{4/2}$ is just as decisive at first, but a sudden *ritard* and decrescendo around beat 3.5 at first seems to stall the forward drive. Yet after the resounding F#5 arrival on m.5 and the accompanying resumption of the quicker tempo, that seeming hesitation or even derailment sounds more like a launching gesture, a small pre-climax *ritard*. This seeming retreat ends up acting instead as an anticipation of a bigger event, the slow stretching of the catapult. Notwithstanding this mini-propulsion, Katchen’s buildup and climax is still slighter than Richter’s and Groh’s. The latters’, though crucially different in the ways described above, both have a marching quality, a ponderousness (even through Groh’s pulling away). Katchen’s, on the other hand, *rushes* more than it *drives*; it is less demonstrative. This is perhaps simply a result of the difference in tempo, but perhaps also that Katchen’s crescendo in m.4 is less dramatic and shorter-lived than either Groh’s or Richter’s, which is lent more weight and stress as a result.

Katchen’s treatment of the cadence is perhaps closer to Richter’s propulsion than Groh’s resignation, but also markedly different in several respects, most critically its line and tempo. The alternate treatment of these parameters ramifies well beyond their contrived boundaries. Katchen’s privileging of the top line throughout mm.1-8, in particular the piercing F#5 that rings across m.5, obfuscates the middle voices in m.5, which, along with a quieter G3, so obscures VI as to nearly deny that harmonic affordance completely. The move to VI is faint at best. Contrastingly, Richter announces VI as clearly as he did i⁶. Though he lands assuredly on F#5, it fades quickly, giving way to the parallel third motion in the middle voices and the decisive

move to G $\bar{3}$ and VI. F# $\bar{3}$ does not sustain long enough to muddy the harmonic waters. There is even a sense that his F#5 *goes to* the subsequent E5, forming the line F#5-E5-D5-C-A#-B. Granted, this is a strong, perhaps unavoidable affordance for any performance: E5 has to come from somewhere on its way to D5 and F#5 is the logical, perhaps only, possibility. Even for Katchen, whose reigning and sustaining F#5 is made distinct from the activity below as any, the F#-5-E5-D5 line is still present, albeit faintly. Richter, on the other hand, exploits this linear (and in turn harmonic) affordance, giving it priority in the measure.

Partly due to Richter's stress on beat 2, VI is felt to arrive on that beat, the last two sixteenths acting as a lower neighbor embellishment. Katchen more or less reverses this weighting, subduing the middle voices from beats 1.5 to 3 and then reasserting the last two sixteenths. Given Katchen's underplaying of the VI affordance, however, the meaning of his move is not simply the reverse of Richter. Whereas Richter's last two sixteenth pairs point backwards as ornaments of VI, Katchen's point forward as an extended anacrusis of m.6, a move consistent with his shaping of mm.1-4 and the accentuation of the pickup-downbeat figure throughout. Groh's VI is as clear, as present, as Richter's, but it is a different VI. Because of the resignation of the cadence it is an inward move, an interior subdominant. Richter's, as an overshoot of tonic, acts as an expansion, something beyond the tonic.

The differences in post-cadence tempi between Groh and Katchen on the one hand and Richter on the other bear significantly on grouping, inter-phrase relationship, and overall trajectory. While the former performances resume the pre-accelerando, pre-crescendo tempo (i.e. mm.1-3) at m.4, beat 3 (Groh) and m.5 (Richter), Katchen resumes the accelerated tempo and nearly the volume of m.4 just after the galvanizing

hesitation of m.4, beat 3.5. As a result, Groh's and Katchen's dynamic intensifications around the cadence (despite other differences outlined above) feel just that way—temporary dramatic escalations at a phrasal juncture. Their return to the previous tempo and volume is a return to the opening phrase's dynamic milieu, a suggestion that m.5 is *another* m.1. Which is not to say a *repeat* of m.1 but a *second* m.1, a paired or even complementary phrase beginning. This in turn underlines the relationship between mm.1-4 and mm.5-8 as an antecedent-consequent one. Measure 5's connection to m.1 is thus animated. Namely, the F#5-E5-D5-C5-B4 line can be heard as, reminds one of, responds to, or fleshes out, the opening F#5-D5-B4 descent. It may even be the *same* F#5 that has returned. This is aided by Richter's particular paying of the opening, especially the one-at-a-time feel and the sense that F#5 *goes* to D5 etc. as much as it hovers above. Katchen, however, takes the new tempo and runs with it. Thus his buildup in m.4 is felt to launch not just m.5 but the whole phrase beginning on m.5, which in turn feels mostly *new*. It is not a return to, or paring of, m.1 or the antecedent, but an *extension* or *continuation*. It is not a momentary buildup at the end of the first phrase as much as the commencement of a new movement forward. Not only is the sense of antecedent-consequence downplayed, but m.4 now adheres to mm.5-8 perhaps as much as it does mm.1-3. Now mm.4-8 has an identity; it is the part of the passage that grows, that moves forward, that expands. This also emphasizes (and is emphasized by) the mm.4-5 grouping (though by different means than Richter) and its pairing with mm.6-7. Richter too suggests the mm.4-5/6-7 grouping, but because of his return to the original tempo at m.5, mm.4-8 is not connected as such.

As described above, Groh also connects mm.4-5 and mm.6-7 but more retroaurally. His greater separation of m.4 from m.5 at first emphasizes the phrasal juncture. But

his nearly identical playing of m.6 (and the last sixteenth of m.5)—with the same *crescendo ritard*—immediately recalls m.4 (and the previous sixteenth). Even though he plays m.7 differently than m.5—more assertive, less resigned—the pattern is established. Granted, Brahms does most of the work here; a performer would have to go out of his or her way to undermine the mm.4-5/6-7 pattern. But even if the pattern itself is unavoidable, the way it is made explicit and the work it does are, as always, variable. That Richter establishes mm.4-5 as connected right away, Groh only retroaurally, and Katchen somewhere in between, is already a significant difference. What they each do with it, how they make it work, differentiates them even further.

Groh not only plays m.4 and m.6 similarly, but both their respective pickup sixteenths as well. This is perhaps a trickier task in m.5 than in m.3—m.5's B4 must act as both the culmination of the passing/lower neighbor figure (C#5-A4, F#4-A#4) and an anacrusis to m.6. Granted, m.3's B4 also points backward as the resolution of C#5, but as that event is more distant than the figure that immediately precedes m.5's B4, the double duty seems more manageable. Groh accomplishes this (m.5) with a subtly louder final sixteenth, not too loud to separate it from the previous figure, yet loud enough to insinuate its pointing forward to m.6's downbeat. In fact, it is only the B4, and not the G4, that is louder, despite the more or less equal weighting the previous thirds received. This helps fashion the anacrusis figure and also connects it with m.3's, where Groh similarly stressed B4 while keeping G3's volume consistent with the preceding falling thirds. A less pronounced version of the syncopation/metric hiccup he fashions at the m.3/4 boundary occurs here as a result. Less pronounced for two reasons: there is no surprise and there is no bass note on beat 3 followed by a rest on the downbeat to mislead.

Groh's dynamic shaping of m.4 and m.6 are nearly indistinguishable if taken in isolation. Both begin with a galvanizing crescendo off the pickup accompanied by a slight hastening, then a *ritard* without *decrescendo* on beat 3. (Measure 6's *ritard* may be ever so slightly more pronounced.) Yet their effects are vastly different, even opposite, owing locally to how their ensuing downbeats are played and globally to the phrase and pattern trajectories at play. Above I argued that Groh's subdued arrival on m.5 lends an air of resignation to the entire gesture, retroaurally shading m.4's *ritard* as hesitant, tentative. His decisive arrival on measure 7, however, underscored by a further volume increase, makes m.6's approach into an anticipatory, catapult-like *ritard* climax much like Katchen's mm.4-5, only more dramatic. Measure 7 climaxes where m.5 anticlimaxes, yet both are prepared in the same way.²⁶

Measure 7 rolls forward with the new energy of the climax, but the downbeat of m.8 halts its forward drive. Again a certain hesitation is evinced and Groh proceeds as if hesitantly through to the end of the phrase, decrescendoing as he ritards. If my language here appears to ascribe more narrative agency than usual it is because Groh's clear dynamic shaping maps so well onto Brahms's play with patterns, making (dramatic) sense of those patterns in this particular way. I have already noted how the mm.4-5/6-7 pattern cuts across the 4+4 phrase trajectory. Measure 8 then presents a new, patterned iteration of m.7, potentially upsetting an expectation of a third iteration of the two-measure pattern. Groh's play with dynamics and speed, the alignment of his patterns—*crescendo/accelerando* then *ritard* versus *decrescendo/ritard*—with Brahms's

²⁶ To hear this, imagine aurally if Groh had reversed these treatments and how that changes the ways mm.1-4 and mm.5-8 interact, how the mm.4-5/6-7 pattern is reimagined, and how m.8 now affords different gestural/dramatic possibilities.

suggests the narrative drama I've outlined. Thus the opposite treatments of m.5's and m.7's downbeat, despite (but really because of) the almost identical playing of their approaches, suggests hesitation/resignation and embrace/climax respectively. Together they suggest that mm.6-7 is a *second attempt* at mm.4-5, and given the climax on the former, a "successful" one. Measure 8, particularly its second half, is met with a *decrescendo* and *ritard* similar to that of m.5 and the affective result is again one of tentativeness, a resistance, perhaps, to the "early" m.8 and its premature (in this respect) culmination of the phrase.

One effect of his slowing of m.8 is to call greater attention to its dissonances, (especially after the particularly consonant m.7), in particular the sonority on m.8, beat 3 and the distantly lingering G5 over the F# dominant on the last sixteenth. Groh's slow movement through this measure bespeaks effort, a sense that this chromatically-aided wrangling back to minor was not easily achieved. Context is key here: without a nearly celebratory, clearly major m.7 and the string of D-major chords (from m.6, beat 2 through m.8, beat 2) there is no affordance for the last beat's hesitation and effort. And without the play with and ambiguity between D major and B minor throughout, foregrounded more in Groh than Katchen and Richter (recall his fashioning of a quasi-arrival on D and the way m.4 pulls us back to B minor), the move back to minor would lack this salience.

Case in point, Richter's m.8 is similar to Groh's but evinces nothing like its drama because his context, his trajectories, and his setting up of affordances differ substantially. First, Richter achieves less of a cadence at m.2, thereby establishing less of an opposition between D-major and B-minor. Second, his driving through the cadence at mm.4-5 and the parallel treatment of mm.6-7 does not introduce the sense

of resignation. Richter is never surprised. Though this does not preclude such a gesture for m.8, the hesitation will necessarily mean something different. It will not have the same past to respond to. Richter's m.8 differs from Groh's for a more indigenous reason as well. He starts his *decrescendo/ritard* on the downbeat, whereas Groh begins his only midway through the measure. For Groh this only heightens the sense of surprise at the belabored turn to minor. (Groh almost leads us to expect A-major as the final chord of m.8.) For Richter, this eases the transition back to B-minor. The initial slowing down at m.8 prepares it to an extent, not specifically (as if it now implies F#) but as possibility of a change. Richter's G5 is even fainter than Groh's, practically inaudible, again subduing the sense of effort.

Of course Richter is not responding to Groh, only being made to in my analysis, and it would be a mistake to think of his performance in terms of what it does *not* do. The above is only to underscore, by way of contrast, how Groh sets up his m.8. Richter highlights the patterning of mm.4-5/6-7 by playing them similarly, the latter, even louder and slightly faster, acting as an intensification, an upping of the ante of the former. This longer-range, two-tiered dramatic heightening reaches its peak on the downbeat of m.8, which simultaneously begins its steady denouement. To an extent, the steadiness of the denouement naturalizes the harmonic turn to B-minor, easing that transition.

Katchen, like Groh, climaxes on m.7, with a similar propulsive *crescendo/ritard* in m.6. Like Richter, his mm.4-5/6-7 suggest an escalation, that the second iteration is *more than* the first, exceeding it. In the context of the larger escalation (mm.4-8 over mm.1-3, see above) this local escalation is even more salient. By the time he reaches m.8, though, the denouement is underway, and the extended, gradual coming down

naturalizes the end of the phrase. There is little to no sense of surprise or thwarted expectation. This is also a result of Katchen's general prioritizing of the top line so that the A5(m.7)-G5(m.8)-F#5(m.9) line, which he strongly connects, makes sense of and/or obscures the turn back to minor. Just as mm.1-4 is driven by the line **F#5---A5-G5---F#5-C#5---B4-E5**, with a strong anacrusis-downbeat feel, mm.4-8 is driven by the line **E5-D5-C#5-F#5---E5-D5-C#5-A5---G5**, where E5-D5-C#5 works as an extended, but similarly propulsive pickup. As noted above, Katchen separates the top line in mm.5-8 from the parallel thirds beneath, enabling (or resulting in) the clarity of this linear drive. Measure 8's G5 does not echo as a now-dissonant vestige over the last harmonic turn as much as it continues to take center stage despite it. Katchen makes it act as F# dominant's minor 9th.

*

The goal of the above analyses is threefold: first, to demonstrate the viability, communicability, and interest of first-person descriptive accounts of music experience; second, to exemplify the phenomenology I develop in the following chapter; and third, to illustrate how this kind of analysis can interact with music theory. As the first is, in the end, for the reader to decide and the second to be considered at length in chapter 4, I offer a few thoughts, by way of conclusion, on the third.

I submit that attending to the complexity of experience and the subtleties of performance and taking both not as incidental to but constitutive of the phenomenon of music allows for the challenging and honing of our traditional theoretical categories

and labels in several important ways. First, it serves as a reminder that the structures of music theory (e.g., interval, line, progression, motive, phrase, etc.) do not exist on the page but are created in performance. A line is not a line until it is connected as such, a progression not a progression unless it is made to progress. Moreover, the relationship between score and sound is not one of the implicit being made explicit. Performance does not simply realize or not the structures posited by music theory to inhere in notation. As I have shown, different performances can suggest not only divergent, even opposing structures, but structures, patterns, and trajectories unforeseeable from a consideration of the score alone. For instance, the metric ambiguity that pervades many performances of Chopin's prelude and the various melodic, contrapuntal, phrasal, motivic, and harmonic ramifications of its treatment are not evident in the score.

Second, even where performance suggests structures that roughly correspond to theoretical ones (e.g. Chopin's mm.1-4 as an antecedent or the collection of notes in each measure as the basic motive), individual actualizations will always be more specific and complex than our abstract labels. We can speak of different trajectories an antecedent can imply, different ways a 2+2 subdivision can work, and nuance our categories accordingly. Those categories can, in turn, speak more sensitively to specific situations.

More generally, variability in performance calls into question the status of some of our most basic claims. To wit, if it is true that different performances can realize fundamentally different, even opposing structures, trajectories, and gestures, out of the "same" music, what does it then mean to say that certain structures simply *exist* in certain pieces? Returning to the opening measures of the Brahms intermezzo, what is

the status of the standard claim about these opening measures, namely, as mentioned above, that they conceal root progressions by fifth? What if that is only one possibility afforded by the score? Moreover, what if that affordance when vaguely realized by a performer like Groh, is so distant from that label “root progression by fifth” that its usefulness in this situation is questionable?

My aim, however, is neither to dismiss these concepts and labels nor deny their reality—certainly I have made abundant use of them throughout—but to put them into dialogue with experience, thereby refining them. To be sure, these concepts are always operating in our experience, if implicitly, but they need not determine our experience. There is always an excess of felt experience over and above the categories we assign and subsume that experience under. By paying attention to that excess, in fact testing our categories against our felt experience, we can make those categories say more, do better justice to specific situations. We can introduce continuums into otherwise stable categories, make finer and finer discriminations among them, even create new ones. In short, our terms and labels could become the beginning of analytical discussion rather than its conclusion. Shifting the focus from object to event, I submit, ultimately enriches our understanding of both.

CHAPTER 4

The “Flow of Experiences” and the “Experience of Flow”

In the natural attitude, I do not have *perceptions*, I do not posit this object as beside that one, along with their objective relationship, I have a flow of experiences which imply and explain each other both simultaneously and successively.

- Maurice Merleau-Ponty¹

What is clear to me now that was not clear before is that structure as such, frozen structure, is a myth, or at least a limiting case.

- J.J. Gibson²

Our solution is a new understanding of how things “are,” not only objects, but also their processes which are generating their structures. Nothing is only objects. *There are no objects alone.* They are the implicit intricacy that implies a sequence of events in which each next event brings a fresh implying.

- Eugene Gendlin³

The following is an attempt to take (musical) experience seriously. To neither read reified structure back into the processes that intimate it nor insert process back into those structures in a misguided retrofitting. To recognize the temporal, emergent, and processive neither as incidental to experience nor as some intermediate stage in the ultimate fixing of meaning, but as an experiential norm, simply the way things are. To take “meaning” as verb rather than noun and to insist that it is not the product, endpoint, or goal of ongoing experience but the process itself, the condition of ongoing experience’s intelligibility. To resist for a moment the human drive toward

¹ Maurice Merleau-Ponty, *Phenomenology of Perception*, trans. Colin Smith (London ; New York: Routledge, 2002), 327. Emphases are original unless otherwise noted.

² James Jerome Gibson, *The Ecological Approach to Visual Perception* (Hillsdale (N.J.): Lawrence Erlbaum Associates, 1986), 87.

³ E. T. Gendlin, “Process Generates Structures: Structures Alone Don’t Generate Process,” *The Folio* 23, no. 1 (2012): 11.

hypostatization, abstraction, and structuring that is incessant, powerful, indispensable, and often ingenious, but ultimately fictitious, a convenient untruth.

Music is both special and not. It is an experience like any other. Thus translation or adaptation of some pure experiential model to music should not be necessary—in fact, perhaps the opposite. Music experience is experience, but because of its perceived specialness—its infamous ephemerality and seeming inconcretion⁴—music can also be a model of process and passage, those basic aspects of all experience. In other words, everything happens “in time,” even the most abstract conceptualization. Nothing escapes (temporal) experience. But because music has come to represent temporality itself⁵—perhaps partly because it, unlike poetry or painting, determines the time it takes to perceive it⁶—it is the most glaring, stubborn example of process and ephemerality. We can exploit this misconception. Traditionally thought of, even denigrated, as an exception, we may now use it as the paragon of a new rule. We may turn this historical shortcoming into an advantage, transform this pejorative into a virtue.

Toward this end, I follow, and coordinate, three thinkers—Maurice Merleau-Ponty, J.J. Gibson, and Eugene Gendlin—in the formulating of “momentum,” my

⁴ See Christopher Hasty, “The Image of Thought and Ideas of Music,” in *Sounding the Virtual: Gilles Deleuze and the Theory and Philosophy of Music*, 2010, 1–22.

⁵ For example, Husserl famously took the perception of a melody to be a paradigmatic case of time-consciousness. Edmund Husserl, *On the Phenomenology of the Consciousness of Internal Time (1893-1917)*, trans. John Barnett Brough (The Netherlands: Kluwer Academic Publishers, 1980). Bergson and James also paid special attention to the perception of melody. Langer famously claimed that “music makes time audible.” Susanne K. Langer, *Feeling and Form: A Theory of Art Developed from Philosophy in a New Key* (Charles Scribner’s Sons, 1953), 110.

⁶ Though poetry and painting obviously take time to perceive, the time it takes is up to the perceiver, not the perceived. Moreover, because a poem and a painting seem to appear all at once, it is easy to fool ourselves into thinking that their perception does too.

word for the flow of ongoing experience. Yet already that language implies that there is experience and it *has* a flow, that there is some essential, transcendent content or structure that is then “unfolded” in time,⁷ much like a score is thought to be “realized” in performance. My point will be that flow is not ancillary to but constitutive of experience, that if there is structure, it is the flow itself. What things mean is inextricably tied up with when they appear. The meaning of events is not just time-sensitive but time-determinative. Time is not “*t*,” one parameter among others, but a condition of all others. In short, the flow *is* already a meaning. What these thinkers give us, *inter alia*, is a way to think about process as *constitutive* of meaning, to recognize flow as essential to our skillful coping in the environment. As music exists in the environment, I will ultimately argue that our skillful coping with it, our absorption in musical flow—momentum—*is* a basic, grounding musical meaning.

My approach is phenomenological, both specifically and generally. Specifically, I incorporate particular ideas and insights from these three thinkers.⁸ Generally, I adopt the stance of phenomenology, the spirit of its inquiry. This is not a copout but squarely in the tradition. Phenomenology (at least the Merleau-Pontian variety) may in fact be less a strict system than it is a certain posture, an attitude. To the question

⁷ This is precisely the problem with and why we default to using the metaphor “unfold in time,” which implies a structure, an essence, that is all there, only folded up. Time simply unravels it. This ill-begotten metaphor shows just how deep the structuralist bias runs, namely that even our conceptualizations of temporality and process are fundamentally spatial.

⁸ This is not to say that I consider Gibson, or that he considered himself, a phenomenologist, only that his thought can be profitably understood in that light. Gibson was apparently unaware of Merleau-Ponty’s work until later in his career, though he recognized a deep sympathy in their thinking. See John T. Sanders, “Merleau-Ponty, Gibson, and the Materiality of Meaning,” *Man and World* 26 (1993): 299–300.

that opened *Phenomenology of Perception*, “What is phenomenology?,” Merleau-Ponty conceded:

It may seem strange that the question has still to be asked half a century after the first works of Husserl. The fact remains that it has by no means been answered....

...the opinion of the responsible philosopher must be that phenomenology can be practiced and identified as a manner or style of thinking, that it existed as a movement before arriving at complete awareness of itself as a philosophy...We shall find in ourselves, and nowhere else, the unity and true meaning of phenomenology.⁹

Nearly four decades later, Thomas Clifton considered the same question in his preface to *Music as Heard*:

But this question was asked by Merleau-Ponty in 1945 in the preface to his *Phenomenology of Perception*, when Husserlian phenomenology was already about forty years old. If it has not yet been answered by either Husserl himself or subsequent phenomenologists, then I myself respectfully decline to answer it, at least in formal terms. To be sure, some idea of what phenomenology is will be revealed by the way it is used, but the main emphases here is how one thinking phenomenologically, and on the sort of phenomenological thought that can be communicated. The same option was taken by Virgil Aldrich in his *Philosophy of Art*.¹⁰

⁹ Merleau-Ponty, *Phenomenology of Perception*, vii-viii.

¹⁰ Thomas Clifton, *Music as Heard: A Study in Applied Phenomenology* (New Haven: Yale University Press, 1983), vii.

Three decades later, I can do no better than echo these sentiments and try to do them justice.

I begin with a joint consideration of Merleau-Ponty and Gibson and subsequently demonstrate connections with Gendlin. Once this picture of experience is sketched, I focus on and flesh out the role of temporality in these systems of thought, building toward my notion of “momentum.” Finally, I turn to musical experience and its analysis.

✱

Though Merleau-Ponty and Gibson ostensibly studied visual perception, their inquiries took them well beyond the traditional boundaries of that term, or rather, their radical rethinking of “perception” necessitated a widening of the term to encompass body, action, environment—in short, being-in-the-world. Their broadening of “perception,” in other words, was precisely the point. Abandoning the centuries-old dogma that perception is essentially the mental (inner) configuration of brute sense data (outer), Merleau-Ponty and Gibson contended that what we perceive, in the first instance, are not raw sense data or even objects as such, but an already meaningful *environment* that “affords” (Gibson) or “solicits” (Merleau-Ponty) opportunities for action. Thus perception came to be understood by both not as a sensation-based, essentially passive faculty, but a holistic bodily *behavior*, indeed the foundational condition of our being and acting meaningfully in the world. “Perception is not a science of the world, it is not even an act, a deliberate taking up of a position;”

Merleau-Ponty argued, “it is the background from which all acts stand out, and is presupposed by them.”¹¹ Resisting the strict subject/object, organism/environment dualities, they sought not only to place man *in* the world, but to understand him as being *of* the world.¹² Thus Gibson spoke of the “mutuality” and “reciprocity” of the unitary “organism-environment,”¹³ and Merleau-Ponty, in his later work, of *chair*, the substance that constitutes and connects both man and world.¹⁴ What might seem a mystical or metaphorical claim—indeed, for an entrenched dualist it would have to be—is instead practical and realist. As John Sanders put it, underlying both approaches is “an argument to the effect that what is *out there*—what we *respond to*—is a function, to an important degree, of *us*.”¹⁵ Merleau-Ponty and Gibson show that the very intelligibility of the world must rest on our prior and primal communion with it.

Despite some important differences, their thinking on these matters is remarkably similar, especially considering they were developed in isolation from one another.¹⁶ In addition to the common influence of Gestalt psychology, this is perhaps also due to their identification of the common enemy outlined above, what Charles

¹¹ Merleau-Ponty, *Phenomenology of Perception*, xi.

¹² Note on M-P’s *chair*.

¹³ Gibson, *The Ecological Approach to Visual Perception*, 8.

¹⁴ Maurice Merleau-Ponty, *The Visible and the Invisible*, trans. Alphonso Lingis (Evanston, Ill.: Northwestern University Press, 1969).

¹⁵ Sanders, “Merleau-Ponty, Gibson, and the Materiality of Meaning,” 289.

¹⁶ Sanders, “Merleau-Ponty, Gibson, and the Materiality of Meaning.” Though the affinity is often remarked upon by contemporary phenomenologists and ecological psychologists, Sanders’s account, substantial but still brief, is the only one that takes that affinity as its subject. See also Harry Heft, “Affordances and the Body: An Intentional Analysis of Gibson’s Ecological Approach to Visual Perception,” *Journal for the Theory of Social Behavior* 19, no. 1 (1989): 1–30.

Taylor called the “meditational epistemology,” or the “Inside/Outside [I/O] picture.”¹⁷ Both reacted against prevailing empiricist and behaviorist dogmas, rejecting stimulus-response-based, causal, and mechanistic explanations of perception, and, equally, rationalistic or mentalistic make-ups for the former’s shortcomings. In many ways, their projects are most naturally understood in this light, for their trenchant critiques of the dominant approaches to perception already imply central features of their positive accounts. It is precisely this rhetorical maneuver that structures much of Merleau-Ponty’s *Phenomenology of Perception*.¹⁸ In exposing aspects of the phenomena in question that traditional approaches necessarily miss or cannot explain, he outlines essential aspects of his alternative, corrective approach. His positive account, in other words, is the obverse of his critique. Gibson’s disavowal of traditional theories—the dualism of mind and body, mental and physical—came gradually and took the form of a personal conversion: his early work (*The Perception of the Visual World* (1950)) proceeded largely on the cornerstone assumption of traditional psychology.¹⁹ Only later, with *The Senses Considered as Perceptual Systems* (1966) and *The Ecological Approach to Visual Perception* (1979) did he, rejecting his earlier approach, offer his groundbreaking new paradigm. I will therefore begin with their critiques.

As Merleau-Ponty sees it, the study of perception has traditionally been plagued by

¹⁷ Charles Taylor, “Merleau-Ponty and the Epistemological Picture,” in *The Cambridge Companion to Merleau-Ponty*, ed. Taylor Carman and Mark B. N. Hansen (Cambridge: Cambridge University Press, 2005), 26.

¹⁸ This is also the strategy I have attempted to emulate in this dissertation. In chapters 1 and 2 I argued that Lakoff & Johnson’s “embodied realism,” though certainly an advance over classic intellectualist/rationalist epistemologies, falls prey to a core intellectualist trap: namely, positing meditational schemes to configure a brute sensorial “outside.”

¹⁹ Edward S. Reed, *James J. Gibson and the Psychology of Perception* (New Haven and London: Yale University Press, 1988), 3.

the twin “prejudices” of “empiricism” (e.g. Berkeley, Hume) and “intellectualism” (e.g. Descartes, Kant). While the former takes sensations as the basic units of perceptual experience, the latter understands perception as a function of, or simply nothing other than, thought or judgment. Though in key respects at odds with one another, Merleau-Ponty shows that these approaches are deeply related and commit some of the same fundamental errors. Perhaps most importantly, both “take the objective world as the object of their analysis”²⁰ and, by assuming this “ready-made world,”²¹ take perception as another fact in the world rather than the primal disclosing of a world in the first place.

Merleau-Ponty’s criticism of empiricism rests on two charges: descriptive inaccuracy and theoretical incoherence.²² First, the notion of a pure, determinate sensation “corresponds to nothing in our experience.”²³ I do not ordinarily perceive discrete, context-free sense data or qualia (say, “red here now”) but things (including their invisible backsides), people, events, and their affordances, indeed an entire “horizon of significance.”²⁴ What I perceive is neither reducible, nor stands in causal relation, to the bare physical input that impinges on my retina, as most any optical illusion evinces. To account for the order and meaning of perception over and above the bare sensory input (e.g. something so basic as a figure’s edges, or that a background persists behind a figure), the empiricist postulates the principles of

²⁰ Merleau-Ponty, *Phenomenology of Perception*, 30.

²¹ *Ibid.*, 241.

²² Taylor Carman, “Between Empiricism and Intellectualism,” in *Merleau-Ponty: Key Concepts*, ed. Rosalyn Diprose and Jack Reynolds (Stocksfield [UK]: Acumen, 2008), 44–45.

²³ Merleau-Ponty, *Phenomenology of Perception*, 3–4.

²⁴ *Ibid.*, 523. This is to say, following Husserl, that consciousness, being “intentional,” is always consciousness *of* something.

“association” and memory by which the mind groups sensations into meaningful perceptions. But such accounts only beg the question for, as Merleau-Ponty points out, “the unity of the thing in perception is not constructed by association, but is a condition of association.”²⁵ The empiricist cannot, in the end, reconstruct the “intentionality” of perception—i.e. that consciousness, as Husserl said, is always consciousness *of* something—from the non-intentional, context-less atoms of sense data.²⁶

The “intellectualist antithesis” posits that perception essentially involves thought or judgment. Though it appears to make up for various empiricist faults, for instance, replacing a passive perceiver with an active one, it nonetheless falls prey to the same errors. For one, intellectualism still subscribes to the “constancy hypothesis”—the supposition of an isomorphism between stimulus and sensation—precisely to demonstrate the need for judgment, in the form of conceptual schemes, categories, etc. Now, however, the bare sense data is interpreted or even constituted by attention and thought to effect perceptual meaning. But if the stimulus remains fixed, then “attention remains an abstract and ineffective power, because it has no work to perform.”²⁷ Attention, conceived of as a searchlight, has no part to play, for instance, in the move from perceptual indistinctness to distinctness, for there was nothing confused in the stimulus to begin with. Aside from the problems it inherits from empiricism, intellectualism, by binding judgment to sensation, fashions new ones. Because

²⁵ Ibid., 19–20. Taylor Carman, “Sensation, Judgment, and the Phenomenal Field,” in *The Cambridge Companion to Merleau-Ponty*, Cambridge Companions to Philosophy (Cambridge, UK; New York: Cambridge University Press, 2005), 57.

²⁶ David R. Cerbone, “Perception,” in *Merleau-Ponty: Key Concepts*, ed. Rosalyn Diprose and Jack Reynolds (Stocksfield, UK: Acumen, 2008), 124–26.

²⁷ Merleau-Ponty, *Phenomenology of Perception*, 32.

“judgment is everywhere pure sensation is not—that is, absolutely everywhere,”²⁸ intellectualism ends up denying the very distinction between sensation and judgment that ordinary experience plainly manifests. Moreover, if perception simply is judgment, then perception becomes incorrigible. As Merleau-Ponty puts it, “if we see what we judge, how can we distinguish between true and false perception?”²⁹ Most troubling, intellectualism appears to deny the phenomenal appearances underlying the judgments we supposedly make about them.³⁰ “The result,” Merleau-Ponty concludes, “is that the intellectualist analysis eventually makes nonsense of the perceptual phenomena which it is designed to elucidate.”³¹

Gibson’s critique of traditional approaches is less a dismantling than a dismissal, though his diagnosis mirrors Merleau-Ponty’s:

The simple assumption that perceptions of the world are caused by stimuli from the world will not do. The more sophisticated assumption that perceptions of the world are caused when sensations triggered by stimuli are supplemented by memories will not do either. Not even the assumption that a sequence of stimuli is converted into a phenomenal scene by memory will do. The very notion of stimulation as typically

²⁸ Ibid., 39.

²⁹ Ibid., 40.

³⁰ Taylor Carman, *Merleau-Ponty* (London ; New York: Routledge, 2008), 57–58.

³¹ Merleau-Ponty, *Phenomenology of Perception*, 39. For a discussion of the relevance of Merleau-Ponty’s critique of intellectualism for more recent cognitivist enterprises, see Hubert L Dreyfus, *What Computers Still Can’t Do: A Critique of Artificial Reason* (Cambridge, Mass.: MIT Press, 1992) and Hubert L. Dreyfus, “Merleau-Ponty and Recent Cognitive Science,” in *The Cambridge Companion to Merleau-Ponty*, ed. Taylor Carman and Mark B. N. Hansen (Cambridge, UK ; New York: Cambridge University Press, 2005), 129–50.

composed of discrete stimuli has been abandoned....Not even the current theory that the inputs of the sensory channels are subject to 'cognitive processing' will do.³²

Most of Gibson's support of these claims is implied in his new theory, but his occasional explications are as incisive as they are succinct:

The error lies, it seems to me, in assuming that either innate ideas or acquired ideas must be applied to bare sensory inputs for perceiving to occur. The fallacy is to assume that because inputs convey no knowledge they can somehow be made to yield knowledge by "processing" them. Knowledge of the world must come from somewhere; the debate is over whether it comes from stored knowledge, from innate knowledge, or from reason. But all three doctrines beg the question. Knowledge of the world cannot be explained by supposing that knowledge of the world already exists. All forms of cognitive processing imply cognition so as to account for cognition.³³

For both thinkers, then, the problem begins by assuming a world as science describes it then charging perception with the task of reconstructing that world. Simply put, this is the wrong world to be explaining. Thus Gibson crucially distinguishes between the "world" and the "environment," or synonymously, between "physical reality" and "ecological reality:"

³² Gibson, *The Ecological Approach to Visual Perception*, 238.

³³ *Ibid.*, 253.

The world of physical reality does not consist of meaningful things. The world of ecological reality, as I have been trying to describe it, does. If what we perceived were the entities of physics and mathematics, meanings would have to be imposed on them. But if what we perceive are the entities of environmental science, their meanings can be *discovered*.³⁴

An “environment,” that which surrounds (*environ*) the organism and in fact implies it (just as an organism implies an environment³⁵), shows up as always already meaningful. When this is taken into account, when we begin to describe the pertinent reality, the question of our knowledge of that world becomes far less complicated. Traditional epistemology has claimed that what we are aware of is not the world out there, but subjective representations in our minds. Gibson’s solution to the basic epistemological problem is to place knowledge in an environment that is already meaningful to a perceiver with whom it has coevolved, indeed because they have coevolved. It is striking how simply this maneuver obviates the need for the convoluted and ultimately incoherent mechanisms of intellectualism (or what Gibson equivalently calls “mentalism”): “Instead of postulating that the brain constructs information from the input of a sensory nerve, we can suppose that the centers of the

³⁴ Ibid., 33.

³⁵ “The fact is worth remembering because it is often neglected that the words *animal* and *environment* makes an inseparable pair. Each term implies the other. No animal could exist without an environment surrounding it. Equally, although not so obvious, an environment implies an animal (or at least an organism) to be surrounded. This means that the surface of the earth, millions of years ago before life developed on it, was not an environment, properly speaking. The earth was a physical reality, a part of the universe, and the subject matter of geology... We might agree to call it a world, but it was not an environment... The mutuality of animal and environment is not implied by physics and the physical sciences.” Ibid., 8.

nervous system, including the brain, resonate to information.”³⁶

In place of a processing account, Gibson offers a theory of “information pickup.” Information, on this account, is not something to be sent and received, transmitted across some channel. “The environment does not communicate with the observers who inhabit it”; rather, “the world is *specified* in the structure of the light that reaches us, but it is entirely up to us to perceive it.”³⁷ More specifically, the “ambient optic array” offers the perceiver information about the environment as well as herself:

The optic array *changes*, of course, as the point of observation moves. But it also does *not* change, not completely. Some features of the array do not persist and some do. The changes come from the locomotion, and the nonchanges come from the rigid layout of the environmental surfaces. Hence, the nonchanges specify the layout and count as information about it; the changes specify locomotion and count as another kind of information, about the locomotion itself. We have to distinguish between two kinds of structure in a normal ambient array, and I shall call them the *perspective structure* and the *invariant structure*.³⁸

Crucial to Gibson’s notion of perception, then, is locomotion, the movement of the observer. As he asserts, “[o]ne sees the environment not just with the eyes but with

³⁶ James J. Gibson, *The Senses Considered as Perceptual Systems* (Boston: Houghton Mifflin, 1966), 267.

³⁷ Gibson, *The Ecological Approach to Visual Perception*, 63.

³⁸ *Ibid.*, 73.

the eyes in the head on the shoulders of a body that gets about.”³⁹ Perception is exploratory, the perceiver a “self-tuning system” that “hunts until it achieves clarity.” And because perceptual clarity is inherently beneficial, “the pickup of information is *reinforcing*.”⁴⁰

The tight, reciprocal connection between perception and action, and indeed the entire theory of ecological optics, culminates in Gibson’s notion of *affordances*. The perceiver does not simply register the variant and invariant structure of the environment, but also, and concurrently, what the environment “*offers* the animal, what it *provides* or *furnishes*, either for good or ill.” Thus an apple affords, among other things, nourishment, throwing, but not sitting, a tree shelter and climbing, a fire warmth or danger, etc. Gibson’s radical claim is that affordances, “the values and meanings of things” are *directly* perceived.⁴¹ “The theory of affordances implies that to see things is to see how to get about among them and what to do or not do with them. If this is true, visual perception serves behavior, and behavior is controlled by perception.”⁴² As something that exists as a fact *in* the environment but *for* a perceiver, affordances transcend and undermine the usual subject-object duality:

³⁹ Ibid., 222.

⁴⁰ Gibson, *The Senses Considered as Perceptual Systems*, 271. Gibson here references the earlier work of Woodworth on the “reinforcement of perception.” It is no accident that in the last few decades, much promising work has been done on simulated, feed-forward networks. See Hubert Dreyfus’s discussion of Walter Freeman’s networks in Dreyfus, “Intelligence Without Representation—Merleau-Ponty’s Critique of Mental Representation: The Relevance of Phenomenology to Scientific Explanation,” *Phenomenology and the Cognitive Sciences* 1, no. 4 (2002): 374–77.

⁴¹ Gibson, *The Ecological Approach to Visual Perception*, 127.

⁴² Ibid., 129.

[A]n affordance is neither an objective property nor a subjective property; or it is both if you like. An affordance cuts across the dichotomy of subjective-objective and helps us to understand its inadequacies. It is equally a fact of the environment and a fact of behavior. It is both physical and psychological, yet neither.⁴³

The interdependence and reciprocity of body and world⁴⁴ is central to Merleau-Ponty's project as well. Indeed, perception itself is reimagined as their original connectedness, our primal openness onto the world. It is this background sense that he calls the *phenomenal field*—neither an “inner world” nor a purely external reality—in which the unity of perceptual objects is sensed as “a whole charged with immanent meaning.”⁴⁵ I see not just that cardboard box (and certainly not its objective measurements) but also its heaviness. The bottom *looks* stressed. It may even already *feel* heavy to me if I'm meant to lift it. I sense its backside, its three-dimensionality, though I cannot technically see it. This is partly to say that the initial grasping of a perceptual situation is synesthetic. Considering a red woolly carpet, Merleau-Ponty maintains that “this red would literally not be the same if it were not the ‘woolly red’ of a carpet.”⁴⁶ It is only on the basis of this prior, gestalt, contextualized meaning that the derivative notions of sensation and judgment are even intelligible. Only when I step back from this normal, engaged perception and explicitly focus on individual *qualia* that the notion of discrete sensations (e.g. “redness”) arise. And only in a derivative

⁴³ Ibid. See also Reed, *James J. Gibson and the Psychology of Perception*, 293–94.

⁴⁴ Merleau-Ponty's “world” corresponds to Gibson's “environment.”

⁴⁵ Merleau-Ponty, *Phenomenology of Perception*, 66–67.

⁴⁶ Ibid., 5.

analytical posture can I conceptualize what I see.

What is lacking, among other things, in the traditional approaches is the situatedness and embodiment of perceivers. Thus Merleau-Ponty stresses the inherently perspectival nature of perception, a “view from somewhere” rather than the spurious “view from nowhere” that philosophy and psychology (and science) typically assume.⁴⁷ This perspective is a function not just of our necessarily seeing from some particular physical position, but, more deeply, our particular bodily skills and orientation, what Merleau-Ponty calls the *body schema*. Thus intentionality, the aboutness of perception, is subtended by what Merleau-Ponty calls *motor intentionality*, the inherent directedness and significance of bodily movement. When I reach for the coffee mug, for instance, “[f]rom the outset the grasping movement is magically at its completion.”⁴⁸ I do not just launch my arm in its general direction and then logically figure out how to pick it up. Rather, my hand readies itself at the moment my arm moves toward the mug, and specifically for *this* mug, with its specific dimensions, material, and expected weight. I will have a physically different grasp if it is full and I am grabbing it to drink than if it is empty and I am clearing the dishes. It is not just my arm and hand, however, but an entire bodily readiness, a fact revealed most saliently when I misjudge a situation. The awkward jolt of my body when I lift the box I mistook as heavy attests to this bodily readiness. The significance, the very meaning of the mug or the box, including what it affords, resides in my movements with respect to it. In this way, knowledge of the world is embedded in our bodies in a completely non-cognitive (i.e. non-representational) fashion. Yet it is not just in our bodies, but

⁴⁷ Carman, *Merleau-Ponty*, 8–14.

⁴⁸ Merleau-Ponty, *Phenomenology of Perception*, 119.

our bodies *in the world*—hence the unitary “being-in-the-world” (*etre au monde*, echoing Heidegger’s *In-der-Welt-Sein*). As Charles Taylor emphasizes, this kind of knowledge resides in neither subject nor object, but in the very interaction of a coping organism and its environment:

My ability to throw baseballs can’t be exercised in the absence of baseballs. My ability to get around this city, this house, comes out only in getting around this city and house...

...We might be tempted to say that it doesn’t exist in my mind, like my theoretical beliefs, in my “head,” but in my ability to move that I have in my whole body. That understates the embedding. The locus here is the ability to move-in-this-environment. It exists not just in my body, but in my body-walking-the-streets.⁴⁹

Perception, inextricably linked with action, involves, or simply is, our entire orientation toward and within the world. Yet it would be a mistake to think that perceptions arrive fully determinate. For Merleau-Ponty, the process of perception integrally involves the clarification, the very *determination* of, the perceptual scene and its significance. As Taylor Carman has it, [p]erception...involves the organism in a constant fluctuation between states of tension and equilibrium, and the very unity of a perceived object amounts to a kind of solution, or anticipated solution, to a problem....⁵⁰ The figure in the distance is blurry so I squint and move toward it. I

⁴⁹ Taylor, “Merleau-Ponty and the Epistemological Picture,” 33–34.

⁵⁰ Carman, “Sensation, Judgment, and the Phenomenal Field,” 57.

can't quite hear you so I rotate my ear in your direction or even cup it. Our body, according to Merleau-Ponty, "is not an object for an 'I think', it is a grouping of lived-through meanings which moves towards its equilibrium."⁵¹ We continuously strive to achieve what Merleau-Ponty calls a *best grip* (*meilleure prise*) on/in the environment:

[M]y body is geared onto the world when my perception presents me with a spectacle as varied and as clearly articulated as possible, and when my motor intentions, as they unfold, receive the responses they expect from the world. This maximum sharpness of perception and action points clearly to a perceptual *ground*, a basis of my life, a general setting in which my body can co-exist with the world.⁵²

This optimality gives rise to norms that guides my perception and action, lending them direction—in short, (motor) *intentionality*.⁵³ *Best*, or *Maximum grip*, in other words, implies normativity, and its achievement in particular situations—e.g. how far to stand from the painting to see certain of its details best, the best lighting to see the true color of this scarf—leads our behavior.

Merleau-Ponty stresses the mutuality of this interaction. It is not that I react to an inert environment. Rather, as Dreyfus puts it, "one's body is simply solicited by the situation to get into equilibrium with it."⁵⁴ Merleau-Ponty's notion of the *intentional arc* sheds light on this phenomenon of *solicitation*. Dreyfus, whose phenomenology of skill

⁵¹ Merleau-Ponty, *Phenomenology of Perception*, 177.

⁵² *Ibid.*, 292.

⁵³ Carman, "Sensation, Judgment, and the Phenomenal Field," 70.

⁵⁴ Dreyfus, "Intelligence Without Representation—Merleau-Ponty's Critique of Mental Representation: The Relevance of Phenomenology to Scientific Explanation," 378.

acquisition fleshes out and exemplifies the idea, defines it as “the tight connection between body and world, such that, as the active body acquires skills, those skills are ‘stored’, not as representations in the mind, but as dispositions to respond to the solicitations of situations in the world.”⁵⁵ What we learn from our successes and failures in the world (as gauged by maximal grip) literally changes the way the world appears to us. The expert chess player sees a different board than I do. The professional chef hears more in that particular sizzle than I do. And I hear more in it now than I once did. That “same” sound is now different to me; now it tells me more about temperature and cooking progress. It now solicits my actions in a more refined and appropriate way: that particular hiss *beckons me* to turn down the temperature. It is not that I hear a sound then add on some internally stored memory to make sense of it, as the intellectualist supposes. Rather, the sound *itself* contains what I have learned. As Dreyfus puts it, “what the learner acquires through experience is not *represented* in the mind at all but is *presented* to the learner as a more and more finely discriminated situation, which then solicits a more and more refined response.”⁵⁶ Merleau-Ponty’s intentional arc thus obviates the need for an account of memory (or at least this kind of situational skill memory) as stored information, and indeed makes better sense of how our past affects our present generally:

⁵⁵ Ibid., 367.

⁵⁶ Ibid., 373. For a discussion of how the phenomenon of solicitation is neither causal nor rational but involves the non-dualistic phenomenon of *motivation*, see Mark Wrathall, “Motives, Reasons, and Causes,” in *The Cambridge Companion to Merleau-Ponty*, ed. Mark B. N. Hansen and Taylor Carman, Cambridge Companions to Philosophy (Cambridge, UK; New York: Cambridge University Press, 2005), 111–28.

[t]he life of consciousness—cognitive life, the life of desire or perceptual life—is subtended by an ‘intentional arc’ which projects round about us our past, our future, our human setting, our physical, ideological and moral situation, or rather which results in our being situated in all these respects. It is this intentional arc which brings about the unity of the senses, of intelligence, of sensibility and motility.⁵⁷

Merleau-Ponty’s solicitations and Gibson’s affordances name essentially the same process, both notions capturing, if slightly differently,⁵⁸ the essential mutuality of organism-environment interactions. And the process described by the intentional arc can apply equally to affordances, which are fixed across neither time nor space. Experience and culture shape and change what counts as an affordance. Learning, for Gibson as for Merleau-Ponty, entails the progressive discrimination and refinement of affordances, and is not stored in the brain but in the way the environment’s very appearance changes for an organism.

Pervading the argument of both thinkers is a common strategy, one that allows them to truly overcome a Cartesian dualism so deep that, as Mark Wrathall notes, “it often constrains even the ways in which it is rejected.”⁵⁹ For instance, attempts to reconcile the mental (mind) and physical (body) still depend on the fundamental

⁵⁷ Merleau-Ponty, *Phenomenology of Perception*, 157.

⁵⁸ For example, Gibson stresses the evolutionary origin of affordances. Additionally, Merleau-Ponty’s term emphasizes the way I am beckoned to action, whereas Gibson’s focus is more on opportunities for action. Gibson held that an affordance exists in the environment whether or not the perceiver is aware of it, whereas solicitations, as the term implies, do not occur outside of a solicitee. See Hubert L. Dreyfus, “The Return of the Myth of the Mental,” *Inquiry* 50, no. 4 (2007): 356–57 and Hubert L. Dreyfus, “Response to McDowell,” *Inquiry* 50, no. 4 (2007): 375. See also Reed, *James J. Gibson and the Psychology of Perception*, 310.

⁵⁹ Wrathall, “Motives, Reasons, and Causes,” 111.

dichotomy, and thus reinforce rather than dissolve the split.⁶⁰ Even forms of monism that explain one element in terms of the other implicitly acquiesce to the positing of only two substances, mental and physical. Merleau-Ponty's and Gibson's approach is more radical. By refusing not only the division of mind and body but the presumption of two fundamental kinds of phenomena from the outset—indeed demonstrating that the very intelligibility of such a view rests necessarily on their primal indivision—they find a “third term” irreducible to the physical or mental.⁶¹ Our foundational form of existence—our being-in-the-world—is describable in neither causal nor rational terms. Our relationship with a reciprocally constituting environment is far more complex, our most basic understanding of both it and ourselves residing not in one or the other, but in their very interaction. And integral to that interaction is the organism's *tuning* to or *resonance* with the environment, the perpetual equilibration, the striving for a *maximal grip* within the world. One of Merleau-Ponty's and Gibson's achievements, then, is the introduction of a new genre of phenomenon—embodied perception—that shatters the dualistic picture.⁶²

Merleau-Ponty and Gibson are logical enough to bring together, but their resonance with Gendlin is slightly less obvious.⁶³ Though influenced by

⁶⁰ This is essentially my argument against Johnson's project at the end of Chapter 2.

⁶¹ Wrathall, “Motives, Reasons, and Causes,” 112.

⁶² See Taylor, “Merleau-Ponty and the Epistemological Picture”; Sanders, “Merleau-Ponty, Gibson, and the Materiality of Meaning.”

⁶³ Ironically, Mark Johnson makes the connection, though I would argue that the connections he makes between their and his philosophy are questionable. Mark Johnson, “Merleau-Ponty's Embodied Semantics—From Immanent Meaning, to Gesture, to Language,” *Euramerica* 1 (2006). Though cf. Eugene Gendlin, “Reply to Johnson,” in *Language Beyond Postmodernism: Saying and Thinking in Gendlin's Philosophy*, ed. David Levin (Northwestern University Press, 1997), 168–175 for Gendlin's critique of Johnson's project (also discussed in chapter 2). See also E. T. Gendlin, “Crossing and Dipping: Some Terms for Approaching the

phenomenology, Gendlin's thought is eclectic and idiosyncratically original. Yet, as I aim to show, understanding some of his central insights in light of M-P's and Gibson's offers mutual illumination.

Gendlin's long-running and multi-faceted project has essentially one aim, outlined in his major work, *Experiencing and the Creation of Meaning*:

Besides the logical dimension and the operational dimension of knowledge, there is also a directly felt, experiential dimension. *Meaning* is not only *about things* and it's not only a certain *logical structure*, but it also involves *felt* experiencing. Any concept, thing, or behavior is meaningful only as some noise, thing, or event interacts with felt experiencing. Meanings are formed and had through an interaction between experiencing and symbols or things...

...The task at hand is to examine the relationship between this felt dimension of experience and the logical and objective orders...what are the functions of felt experiencing in our conceptual operations and in our observable behavior?"⁶⁴

By "experiencing" (or "felt sense," or "implicit intricacy") Gendlin means "that partly unformed stream of feeling that we have every moment,"⁶⁵ that "felt apperceptive mass to which we can inwardly point."⁶⁶ It is "raw" and sometimes nebulous, yet highly

Interface between Natural Understanding and Logical Formulation," *Minds and Machines* 5, no. 4 (1995): 547–60.

⁶⁴ Eugene T Gendlin, *Experiencing and the Creation of Meaning: A Philosophical and Psychological Approach to the Subjective* (Evanston, Ill.: Northwestern University Press, 1997), 1.

⁶⁵ *Ibid.*, 3.

⁶⁶ *Ibid.*, 27.

specific and concrete.⁶⁷ Gendlin shows us how to find it:

First, feel your body. Your body can, of course be looked at from the outside, but I am asking you to feel it from the inside. There you are. There, as simply put as possible, is your experiencing of this moment, now. But we need to remain with that global feel of your body. Let us “divide” it a bit, although no hard and fast division into parts is really possible. Let us create a few aspects of it. We do this with symbols. The symbols will be my sentences below:

Perhaps you feel some tension, or perhaps you feel ease. These words (“tension,” “ease”) give certain qualities and specify aspects of your present experiencing. Let us fashion another, different sort of aspect: how does your chest feel when you inhale?

Nor need we remain with entirely present descriptions. You will have an equally present felt meaning...in the sense that you will have the felt meaning now, if I ask you: how do you generally feel before a meal when you haven’t eaten for a long time? (You feel hunger—using the word to refer to your inward sense of it.) Or recall the way you feel after you have filled your stomach, the heavy satiation. Boredom, that strained impatient deadness which hurts in quite an alive way, often is another aspect you can specify in experiencing.⁶⁸

Gendlin highlights several key features of this inner experiencing. It is not this or that particular feeling (e.g. hunger, boredom, some emotion, etc.) that he wishes to identify,

⁶⁷ Ibid., 11.

⁶⁸ Ibid., 12.

but the ongoing, ever-present “concrete mass” that “is ‘there’ for us.”⁶⁹ Though we may attempt to reach in (what he calls “direct reference” and later “dipping”) and symbolize parts of it, it is inexhaustible—“we can put only a few aspects of it into words.”⁷⁰ Relatedly, it is infinitely explorable: “any datum of experiencing—any aspect of it, no matter how finely specified—can be symbolized and interpreted *further and further*, so that it can guide us to many, many more symbolizations. We can endlessly ‘differentiate’ it further. We can synthesize endless numbers of meanings in it.”⁷¹

Felt meaning operates not only in the realm of the physical, psychological, and emotional, but even in the most abstract forms of cognition:

We cannot even know what a concept “means” or use it meaningfully without the “feel” of its meaning. No amount of symbols, definitions, and the like can be used in the place of the *felt* meaning. If we do not have the felt meaning of the concept, we haven’t got the concept at all—only a verbal noise. Nor can we *think* without the *felt* meaning.... This felt experiencing, not verbalizations, makes up all but a small part of what we think...⁷²

My grasping of any concept or word resides in the felt meaning that is associated with it. (Think “IV chord” and find that meaning in your body—there it is). The moment when I “get” the meaning of that word or idea or what you are saying is the moment of connection with my felt sense— “Ah, I *have* it now.” What it is that I understand in

⁶⁹ Ibid., 11.

⁷⁰ Ibid.

⁷¹ Ibid., 16.

⁷² Ibid., 5–6.

these moments is what Gendlin calls the “implicit intricacy,” always more than our symbolization can capture.⁷³

Though experiencing undergirds nearly all thought, its role in cognition is most apparent in “breakdown” cases. The “tip-of-the-tongue” phenomenon, for instance, shows felt meaning at work: it (the felt sense) *knows* I know what I cannot now recall, can accept or reject possibilities, and leads us to the recall. (That “place” we inwardly focus on and explore in those moments to find the word or name is our felt sense of it.)⁷⁴ Yet it would be a mistake to think of this process as one of the implicit simply being made explicit. Rather, explication changes what was implied:

When we seem to find what “was” there, we have actually moved further. We do not need a false equation. No equation is possible between the implicit and the explicit. What matters is the way in which the next step *follows from* (continues, carries forward, makes sense from) what preceded it.⁷⁵

Felt meaning inherently exceeds our symbolizations of it. Our categorizations, conceptualizations, etc. of experiencing always leave a remainder. But this fact needn’t lead us to postmodern despair. We need not, in Gendlin’s view, be imprisoned in the

⁷³ E. T. Gendlin, “The New Phenomenology of Carrying Forward,” *Continental Philosophy Review* 37 (2004): 141. See also Eugene Gendlin, “How Philosophy Cannot Appeal to Experience, and How It Can,” in *Language Beyond Postmodernism: Saying and Thinking in Gendlin’s Philosophy*, ed. David Levin, 1st ed. (Evanston, Ill.: Northwestern University Press, 1997), 21 for an enumeration of the many functions of the *implicit*.

⁷⁴ Gendlin, *Experiencing and the Creation of Meaning*, 75–76. For the specific, systematic ways experiencing functions in cognition, which is beyond my

⁷⁵ Gendlin, *Experiencing and the Creation of Meaning*, xiii. This is from Gendlin’s 1997 Preface to the new edition.

apparently fixed forms and categories of language. The remainder, the “excess” can be tapped, employed, thought with. This brings us to the heart of Gendlin’s project:

We can develop a new mode of language and thinking which enters, and speaks from, what is *more than* conceptual patterns (distinctions, differences, comparisons, similarities, generalities, schemes, figures, categories, cognitions, cultural and social forms), although these are always inseparably at work as well. For example, “more than” is a pattern, but here it says more than the pattern.

Language brings patterns and distinctions, but *what it says* exceeds them. A new mode of language can turn to advantage what has long seemed a problem: *the incapacity of the conceptual patterns* to control, contain, or capture an unavoidable so-called “excess.”⁷⁶

Gendlin’s “. . . .” represents the excess, in many ways our embodied situatedness, the implicit intricacy of *situations* over and above the generalities of categories and concepts.

The way to speak and think with the “more” is to think and speak *from* the implicit intricacy, “*to speak and think with the way words can exceed their conceptual structure* even while employing that structure.”⁷⁷ In this way, namely by “crossing” words and situations,⁷⁸ “we can let words acquire new uses in our situation here....”

⁷⁶ Gendlin, “How Philosophy Cannot Appeal to Experience, and How It Can,” 3.

⁷⁷ Gendlin, *Experiencing and the Creation of Meaning*, xvi. (from the 1997 Preface)

⁷⁸ Gendlin, “Crossing and Dipping.”

We can say that the situation *gives the word a new life*. A situation *changes itself* in response to the words, and this change is their meaning. The situation *absorbs* the words that are spoken in it....

What these words say is also happening to them here; they say what they make happen.

They say how they work.⁷⁹

This way of thinking and speaking involves the *carrying forward* of the felt sense to the next action or symbolization. I carry forward the “. . . .” from my first attempt at verbalizing this notion or feeling *into* my second, and it carries forward from there, always bringing a “fresh implying.”⁸⁰ Thus an experiential feedback is effected, and by attending to my experiencing of the situation, I am led to finer and finer continuations of the “. . . .”:

A opens into an intricacy of many potentially separable strands. If we articulate even just a few of those, we move beyond the traditional schemes and alternatives. This will of course also involve alternatives, but it need not be the same ones/ This is a major feature of experiential differentiation. The next step is more demanding and precise than can be derived from the conceptual forms and distinctions we had at the previous step. Even one small experiential detail can overarch and overthrow the very distinctions that have led to it.⁸¹

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⁷⁹ Gendlin, “How Philosophy Cannot Appeal to Experience, and How It Can,” 8.

⁸⁰ Gendlin, “Process Generates Structures: Structures Alone Don’t Generate Process,” 3.

⁸¹ Gendlin, “How Philosophy Cannot Appeal to Experience, and How It Can,” 19.

Having outlined central pieces of these three figures' thought and drawn some connections among them, I turn now to the picture of temporality that is suggested by, if not always made explicit in, their thinking. Specifically, I further explore Merleau-Ponty's *maximal grip*, Gibson's notion of locomotion, and Gendlin's *carrying forward*.

Temporal process is built in to Merleau-Ponty's notion of perception at the most fundamental level. Perceptual sense does not consist of discovering determinate meanings, as traditional approaches posited. Rather, it is the ongoing *determination* of sense, its perpetual clarification, that grounds meaning. Our striving to attain a best grip on a situation is not a deficiency or accident of our existence but the very basis of our sense-making. And because situations constantly evolve, our attaining of *maximal grip* is perpetual. In a way, Merleau-Ponty's art gallery example can be slightly misleading:

For each object, as for each picture in an art gallery, there is an optimum distance from which it requires to be seen, a direction viewed from which it vouchsafes most of itself: at a shorter or greater distance we have merely a perception blurred through excess or deficiency. We therefore tend towards the maximum of visibility, and seek a better focus as with a microscope.⁸²

For the purposes of illustration, this example is somewhat simplified. Granted, perhaps at first I am drawn to a view of the whole painting, but my coping with it

⁸² Merleau-Ponty, *Phenomenology of Perception*, 352.

surely does not end there. Gaining that initial clarity allows me to notice more aspects of it, to be solicited to inspect it further. New opportunities, new grips becomes available as a result. I am suddenly drawn to a detail in the top right corner and thus solicited forward, my head drawn up, all the while adjusting for lighting and the various contingencies of the situation. And this new grip affords yet further affordances for perception and action. *Maximal grip* is thus both teleological and endless. The very act of getting into equilibrium with a situation reveals new aspects of the situation that solicit me to get a new grip. This is no accident, for, as Merleau-Ponty explains, my acting in a situation changes the way the situation shows up for me. He demonstrates this dynamic “dialectic of milieu and action” with a description of a skilled football player:

For the player in action the football field is not an “object,” that is, the ideal term which can give rise to an indefinite multiplicity of perspectival views and remain equivalent under its apparent transformations.... The field itself is not given to him, but present as the immanent term of his practical intentions; the player becomes one with it....It would not be sufficient to say that consciousness inhabits this milieu. At this moment consciousness is nothing other than the dialectic of milieu and action. Each maneuver undertaken by the player modifies the character of the field and establishes in it new lines of force in which the action in turn unfolds and is accomplished, again altering the phenomenal field.⁸³

⁸³ Maurice Merleau-Ponty, *The Structure of Behavior*, trans. Alden L. Fisher (Boston: Beacon Press, 1963), 168–69.

The situation evolves *as a result of* our acting to get into equilibrium with it, so that as long as we are coping in a situation, it necessarily changes. *Maximal grip*, then, is a continuous act, not a discrete occurrence. Moreover, it is not continuous in the sense of sequential—i.e. a sequence of discrete events—but, more deeply, in the sense that it is processual through and through. Merleau-Ponty's talk of the football player's "maneuvers" and their effects on the field as if they were distinct points in a chain of events is, I would argue, a contrivance to illustrate the dialectic of milieu and action. The individuation of maneuvers is more the product of later analysis and the exigencies of language than it is a phenomenological reality. In absorbed, skillful coping, there is only *maneuvering*, a flow of inseparable actions and a consequently continuously changing field. The football player does not make a discrete move and then ascertain how the phenomenal field has shifted. Rather, the phenomenal field shifts along and continuously with his moving. The feedback loop is continuous.

Merleau-Ponty's notion of *optimality* sheds further light on this phenomenon. Dreyfus guards against a cognitivist (i.e. intellectualist) interpretation that would understand it in terms of mental representations.

Merleau-Ponty is clear that for this movement toward maximal grip to take place, one does not need a representation of a goal. Rather, acting is experienced as a steady flow of skillful activity in response to one's sense of the situation. Part of that experience is a sense of whether or not coping is going well. When one senses a deviation from the

optimal body–environment gestalt, one’s activity tends to take one closer to an optimal body–environment relationship that relieves the “tension.”⁸⁴

As Merleau-Ponty writes, “to move one’s body is to aim at things through it, it is to allow oneself to respond to their call, which is made upon it independently of any representation.”⁸⁵ An optimal body-environment gestalt, i.e. maximal grip, is not given at the outset as an explicit goal. And yet we find our way there by sensing movement toward or away from equilibrium. As Dreyfus puts it:

[A]lthough absorbed coping has conditions of satisfaction, these are conditions of improvement that consist in moving so as to lower a tension, not so as to achieve an already-represented success, and that, since such conditions of improvement cannot be known by the agent in advance of his feeling satisfied, they cannot be represented as a future state of success that governs or guides the agent’s current movements.⁸⁶

Thus the process of attaining a maximal grip is guided by our sensitivity to *changes* in the situation, whether the grip is getting better or worse. Sensitivity to change involves, or simply is, sensitivity to the *flow* of ongoing experience, a flow that is irreducible to a series of discrete moments mentally compared.

⁸⁴ Dreyfus, “Merleau-Ponty and Recent Cognitive Science,” 137–38.

⁸⁵ Merleau-Ponty, *Phenomenology of Perception*, 160–61.

⁸⁶ Hubert L. Dreyfus, “The Primacy of Phenomenology over Logical Analysis,” *Philosophical Topics* 27, no. 2 (1999): 6–7.

In these ways, perceptual meaning is irreducibly temporal, not just in the trivial sense that experience happens in time, but in the deeper sense that meaning is a function of the flow of experience. Its sense is bound up with its flow.

The registration of change is central to Gibson's account of perception as well. Perception does not even properly begin before locomotion:

[W]hat we see *now*...turns out to be at most a peculiar set of surfaces that happen to come within the field of view and face the point of observation. It does not comprise what we see. It could not possibly be the basis of our perception of the environment. What we see *now* refers to the self, not the environment. The perspective appearance of the world at a given moment of time simply what specifies to the observer where he is at that moment. The perceptual process does not begin with this peculiar projection, this momentary pattern. The perceiving world begins with the pickup of invariants.⁸⁷

Change is in fact so crucial to ecological reality that Gibson replaces the physical world's notions of "time" and "space" with *change* and *persistence*. What is directly perceived are not the abstract units of space and time but the reciprocally related invariants and variants of the environment.⁸⁸ [need Gibson citation]

The pickup of environmental persistence and change does not occur in separable instants that are later assembled together but as an irreducible flow:

⁸⁷ Gibson, *The Ecological Approach to Visual Perception*, 254.

⁸⁸ Ibid., 12–15. Reed, *James J. Gibson and the Psychology of Perception*, 283–87.

The act of picking up information, moreover, is a continuous act, an activity that is ceaseless and unbroken. The sea of energy in which we live flows and changes without sharp breaks. Even the tiny fraction of this energy that affects the receptors in the eyes, ears, nose, mouth, and skin is a flux, not a sequence... Hence, perceiving is a stream.... Discrete percepts, like discrete ideas, are 'as mythical as the Jack of Spades.'⁸⁹

Similarly, *resonance* with or *attunement* to the environment is ongoing, achieved not in discrete instances but in the flow.

For Gendlin, the creation of meaning is an emergent aspect of experiencing. His *carrying forward*, like Merleau-Ponty's *maximal grip*, involves the determination of the indeterminate, a movement toward sense. Consider his description of the poet looking for the next line:

The poet reads the written lines over and over, listens, and senses what these lines need (want, demand, imply). Now the poet's hand rotates in the air. The gesture says that. Many good lines offer themselves; they try to say, but do not say—that. The blank is more precise. Although some are good lines, the poet rejects them.

That seems to lack words, but no. It knows the language, since it understands—and rejects—these lines that came. So it is not pre-verbal; Rather, it knows what must be said, and knows that these lines don't precisely say that. It knows like a gnawing knows what was forgotten, but it is new in the poet, and perhaps new in the history of the world.

⁸⁹ Gibson, *The Ecological Approach to Visual Perception*, 240.

Now, although I don't know most of you, I do know one of your secrets. I know you have written poetry. So I can ask you: Isn't that how it is? This must be directly referred to (felt, experienced, sensed, had,). Therefore, whatever term we use for such a blank, that term also needs our direct reference.

The blank brings something new. That function is not performed by the linguistic forms alone. Rather, it functions between two sets of linguistic forms. The blank is not just the already written lines, but rather the felt sense from re-reading them, and that performs a function needed to lead to the next lines. A second function: If that stuck blank is still there after a line comes, the line is rejected. Thirdly, the blank tells when at last a line does explicate—it releases.

Between the subjective and objective sides there is not a relation of representation or likeness. The words don't copy the blank. How can a set of words be at all like a blank? Rather, what was implicit is changed by explicating it. But it is not just any change. The explication releases that tension, which was the But what the blank was is not just lost or altered; rather, that tension is carried forward by the words. Of course the new phrases were not already in the blank. They did not yet exist at all. When they come they are much more than the blank was, but not just different, either. Just now, my phrase "carrying forward" worked as a term to say this relationship...

I have also used some terms to speak of this *subjective* side. I said that a *felt sense* is a *direct referent*, that its *implicit* meaning is not copied by, or equal to its *explication*, but rather *carried forward* by explication.

Here Gendlin elucidates a feedback loop between the subjective (“felt sense”) and objective sides (linguistic forms). The poet senses the next line and tries to symbolize

it, carrying the felt sense forward, ad infinitum. The meaning partly resides in the very way one step leads to another, in other words, its flow.

But it is not just the searching poet who partakes of this behavior. We all do, or at least can, all the time.

Applying concepts elicits an experiential feedback. We can let our next step of thought come from this experiential feedback, rather than only from the concept. We can think with both conceptual and experiential steps, a “zigzag” which employs both powers. It can make new sense and lead us to modify our concepts, rather than being confined in them or ending in mere contradictions.⁹⁰

For all three thinkers, then, temporal process is the ground of experiential meaning. Part of what it means to attain a *maximal grip*, *resonate* with an environment, or *carry forward* a felt sense, is to be absorbed in the flow of experience. Flow is a condition of meaning.

A particular view of memory follows from, or goes hand in hand with, this privileging of process and flow. Understanding process as a fundamental phenomenon implies a continuity between past and present that traditional accounts of memory—which presume that past experience is stored or retained and then recalled and brought to bear on the present—turn into a derivative phenomena. It is no surprise, then, that Merleau-Ponty, Gibson, and Gendlin all reject this picture.

⁹⁰ Gendlin, *Experiencing and the Creation of Meaning*, xvii.

Gibson does so by way of challenging the very distinction between past and present:

The division between present experience and past experience may seem to be self-evident. How could anyone deny it? Yet it is denied in supposing that we can experience both change and nonchange. The difference between present and past blurs, and the clarity of the distinction slips away. The stream of experience does not consist of an instantaneous present and a linear past receding in the distance; it is not a 'traveling razor's edge' dividing the past from the future... There are attempts to talk about a 'conscious' present, or a 'specious' present, or a 'span' of present perception, or a span of 'immediate memory,' but they all founder on the simple fact that there is no dividing line between the present and the past, between perceiving and remembering. A special sense impression clearly ceases when the sensory excitation ends, but a perception does not. It does not become a memory after a length of time. A perception, in fact, does not *have* an end. Perceiving goes on.⁹¹

Any clear separation of past from present denies the basic continuity of experience.

Gibson is led to an initially startling conclusion:

Evidently the theory of information pickup does not need memory. It does not have to have as a basic postulate the effect of past experience on present experience by way of

⁹¹ Gibson, *The Ecological Approach to Visual Perception*, 253. For more on the problems with the "specious present," see Sean Kelly, "The Puzzle of Temporal Experience," in *Cognition and the Brain: The Philosophy and Neuroscience Movement*, ed. Andrew Brook and Kathleen Akins (Cambridge; New York: Cambridge University Press, 2005), 208–40.

memory. It needs to explain learning, that is, the improvement of perceiving with practice and the education of attention, but not by an appeal to the catch-all of past experience or to the muddle of memory. The state of a perceptual system is altered when it is attuned to information of a certain sort. The system has become sensitized. Differences are noticed that were previously not noticed. Features become distinctive that were formerly vague. But this altered state need not be thought of as depending on a memory, an image, and engram, or a trace. An image of the past, if experienced at all, would be only an incidental symptom of the altered state.⁹²

Previous learning is brought to bear on the present not by virtue of some mental act but by its framing of the very significance of present perception. The past is embedded in the organism in the form of its altered orientation and sensitivities to the environment. It is already present, influencing what features of the current environment, which affordances, can be noticed. Merleau-Ponty expresses a similar idea when he asserts that “the fate of an excitation is determined by its relation to the whole of the organic state and to the simultaneous or preceding excitations.”⁹³

Merleau-Ponty’s *intentional arc*, discussed above regarding learning and skill acquisition, suggests a congruous view. Dreyfus in fact borrows a word from Gibson when he defines it as the way “past experience is projected back into the perceptual world of the learner and shows up as affordances or solicitations to further action.”⁹⁴ The past is not represented in the mind and added to present experience but shows up

⁹² Gibson, *The Ecological Approach to Visual Perception*, 254.

⁹³ Merleau-Ponty, *The Structure of Behavior*, 15.

⁹⁴ Dreyfus, “Merleau-Ponty and Recent Cognitive Science,” 132.

in the way the world now appears to me. In his critique of the empiricist appeal to memory, Merleau-Ponty shows that memory in fact cannot be recalled by the present experience unless it is already understood in light of those experiences. Thus the *only* way previous experience can affect the present is if the latter is grasped from the outset in the terms of the former. The past is not separate from who we are; we carry it forward to every present experience. Merleau-Ponty writes:

The past, therefore, is not past, nor the future future. It exists only when a subjectivity is there to disrupt the plenitude of being in itself, to adumbrate a perspective, and introduce non-being into it. A past and a future spring forth when I reach out towards them. I am not, for myself, at this very moment, I am also at this morning or at the night which will soon be here, and though my present is, if we wish so to consider it, this instant, it is equally this day, this year or my whole life. There is no need for a synthesis externally binding together the *tempora* into one single time, because each one of the *tempora* was already inclusive, beyond itself, of the whole open series of other *tempora*, being in internal communication with them.

Though Gendlin does not discuss memory explicitly, in a sense he does not need to, for the past's role in the present is built into the notion of *carrying forward*. The past is made present precisely by carrying it forward. In the perpetual feedback loop of thought and experience, the flow or trajectory of the "zig-zag" plays a constitutive role in what the next "move" can be. Recognizing the continuity of experience as a ground-

level phenomenon obviates the need for a mentalistic account of memory by implicating it, always and already, in the present.

*

With *momentum*, I aim to capture the essential flow of experience that is both its form and the ground of its meaning. Momentum implies trajectory, path, an irreducible continuity that is not the result of some later synthesis but the very basis of intelligibility. Any analysis of it into a sequence of “now”s is only possible on the basis of its prior indivisibility. A momentum is meaningful only as a flow. Thus even each conceptually isolated instant *contains* the past and already implicates a future. Each moment implies, speaks to, contains, evinces (. . . .) its entire temporal horizon. It *is* its past forever becoming present and projecting into the future. Thus momentum implies accumulation, a perpetual gathering of sense.

My use of the term derives only vaguely from physics. As Gibson demonstrated, the world of the physicist is not the environment as lived. I mean to describe a human momentum, one that is not determined mathematically but by the ongoing coping of an embodied being. We are not determined by these trajectories of meaning only oriented by them. Our momentum does not negate our agency but invests it with immanent meaning.

Crucially, unlike the Newtonian cause and effect that governs physical momentum, this momentum involves the perpetual feedback loop between organism and environment, action and milieu described by Merleau-Ponty. Causation here is not

linear but circular.⁹⁵ That is to say that the meaning of events, even of particular perceptions, is bound up the flow of which it is a part. Momentum puts a name to the “flow of experiences which imply and explain each other both simultaneously and successively,” (and I would add retrospectively). The meaning of what just happened shapes what next happens, but is also shaped by it. Events in the flow are mutually constitutive, helping to make ever more determinate the indeterminate. Momentum is the striving toward maximal grip, the carrying forward of the felt sense. It is the always emerging intertwining nexus of significances and as such, a basic way we make sense of our experience.

My claim is that meaningful engagement with music is fundamentally *momental*, that musical sense emerges in the flow, or better, simply is the flow. The experience of flow is already a meaning. My analyses in chapter 3 are an attempt to describe the momentum of my experience with several performances.

It would be naïve, however, to assume that the act of description stands outside of the experience it describes or, relatedly, that the process of explication is neutral, producing an equivalent of what was implicit. This realization led Merleau-Ponty to a key distinction between his conception of phenomenology and Husserl’s:

If we were absolute mind, the [phenomenological] reduction would present no problem.

But since, on the contrary, we are in the world, since indeed our reflections are carried

⁹⁵ “[T]he relations between the organism and its milieu are not relations of linear causality but of circular causality. Merleau-Ponty, *The Structure of Behavior*, 15.

out in the temporal flux on the which we are trying to seize...there is no thought which embraces all our thought.⁹⁶

Phenomenology is thus a radical kind of reflection in that it takes into account the very act of reflection. One consequence is that a complete description is impossible. For Merleau-Ponty, “[t]he most important lesson which the reduction teaches us is the impossibility of a complete reduction.”⁹⁷

Gendlin’s project rests on the same insight. In a sense, this recognition is a foundation of his philosophy, which shows a way to harness the interaction between words and felt sense. Speaking of the relation of concepts and experience, he writes:

Of course, one cannot stand outside this relation in order to conduct such an examination. The relations to be examined will obtain in the very process of examining. Experiencing will play some of its roles in the process of speaking about—and with—them. This philosophy is therefore constantly reflexive. It can say what it says only as what it talks about also functions in the very saying. And since it tells how the experiential side always exceeds the concepts, this also happens in the concepts right here. The functional relationships and characteristics set forth in this book are themselves specific ways in which their own formulation can be exceeded.⁹⁸

⁹⁶ Merleau-Ponty, *Phenomenology of Perception*, xv.

⁹⁷ Ibid., xv. See also Ted Toadvine, “Phenomenology and ‘Hyper-Reflection,’” in *Merleau-Ponty: Key Concepts*, ed. Rosalyn Diprose and Jack Reynolds (Stocksfield [UK]: Acumen, 2008), 17–29.

⁹⁸ Gendlin, *Experiencing and the Creation of Meaning*, xii.

Gendlin's very explication of his philosophy is necessarily an instantiation of itself, making a virtue of language's effect on the experience it describes.

Description, then, is not reconstruction. Words change the experience they reference, they carry experiencing forward in particular ways. Description carries the experience forward, and the meaning of that experience can be said to reside in the way it was carried forward. But of course examining and explicating that relation will constitute a new carrying forward. Experience never stops; we cannot stand aside and observe or describe it objectively. Describing experience is itself a new experience. But this does not entail that experience forever eludes us, that we are incapable of capturing some aspect of it. Rather, the very way it carries the experience forward is, or becomes, part of its meaning. The perpetual carrying forward, what I would call the momentum of experience, is part of its meaning.

In so many words, what I have tried to do in my analyses (chapter 3) is articulate the momentum of my experience with those performances. Coming to terms (literally) with my experience involved an extended back and forth—Gendlin's "zig-zag"—between listening (experiencing) and articulating, then checking those words against the feeling to see what resonated, then allowing that to carry forward to a new feeling, then a new word, and on and on. This might seem unsystematic or even haphazard in that I chose this rather than that word here and that altered the thread of the analysis. And indeed it is. It may be improvised, but it is not random, for if I have done it well, then at the very least, it is real, it is a set of experiences that really happened, united by an ongoing thread of experience that was sincere, honest, genuine. In this way it is just like life, which is essentially improvised. Way leads on to way. The path is not arbitrary but consequential. It is true that if I began those analyses now, from the

start, they would take different, perhaps remarkably different, paths and forms. This is precisely the point. It is not repeatable. Then again, neither is experience, though we go to great lengths to make it seem so by reifying it into repeatable concepts. But this stability, this permanence and transcendence of concepts, is a myth, albeit a useful one. The unrepeatability of experience could either be denied by a reductive analysis or embraced by an expansive one. An analysis that itself is unrepeatable. If music is process, then shouldn't its analysis be as well?

To show this process at work, I analyze a small part of my analysis, attempting to trace the path of *that* carrying forward. Of course I cannot stand outside of that experience and comment on it neutrally. There can be no true seizure, only a new carrying forward. But this does not render analysis, or this meta-analysis, useless. By dipping back into the experience (and its analysis, and its experience, and its analysis), and carrying new things forward, aspects of what "was" there implicitly can be explicated. It can illuminate precisely by making new experience and thought from it. This is a process as endless as it is rich.

In a way, then, I am treating my earlier writing as a performance and analyzing it as I analyzed the Chopin performances. Whereas the former was an attempt to speak of the momentum of the my experience with the Chopin performance, here I will attempt to speak of the momentum of my analysis. This is thus an attempt to trace the momental thread of the analysis itself, how one feeling led to a description which led to a feeling, etc. There are two major differences, medium and intention. The first is music, the second writing. The first made no attempt at capturing the intention of the performer, the second necessarily does. Part of the meta-analysis involves my memory of how it went and came about. Of course that memory will be changed as I write

about it here, but such is memory. Memory happens in the present. It is carried forward. Let us carry forward this carrying forward.

I begin, as I did with the Chopin, at the beginning. I specifically did not know where the analysis would take me. There was no plan, no outline, no list of essential points to hit. I tried to let it take its own course. Here I will try to illuminate that course and how/why it happened the way it did, though this trying will of course take its own course. There could equally be a meta-meta-analysis.

A true meta-analysis would begin well before I started writing the analysis, perhaps with my selection of the three recordings from the many I heard. Or it could begin with the birth of this project or, for that matter, my birth—the momentum of experience stretches back infinitely. For present purposes, I can say that these three recordings seemed to select themselves by compelling me. Each, and in different ways “pricked” me, as Barthes might put it. For Barthes, who thought of his project in *Camera Lucida* as a “casual phenomenology,”⁹⁹ most photographs stirred in him only a lukewarm, general way, what he termed “*studium*:”

The *studium* is that very wide field of unconcerned desire, of various interest, of inconsequential taste: *I like / I don't like*. The *studium* is of the order of *liking*, not of *loving*; it mobilizes a half desire, a demi-volition; it *is* the same sort of vague, slippery,

⁹⁹ Roland Barthes, *Camera Lucida: Reflections on Photography*, trans. Richard Howard (New York: Hill and Wang, 1981), 20.

irresponsible interest one takes in the people, the entertainments, the books, the clothes one finds “all right.”¹⁰⁰

But occasionally, “in this glum desert, suddenly a specific photograph reaches me: it animates me, and I animate it.”¹⁰¹ This “second element will break (or punctuate) the *studium*.”

This time it is not I who seek it out...it is this element which rises from the scene, shoots out of it like an arrow, and pierces me....This second element which will disturb the *studium* I shall therefore call *punctum*; for *punctum* is also: sting, speck, cut, little hole – and also a cast of the dice. A photograph’s *punctum* is that accident which pricks me (but also bruises me, is poignant to me).¹⁰²

Barthes’s language suggests a special sort of solicitation, a salient affordance for further exploration. He feels called by the photo; it “animates” him. The *punctum* thus begets an “expansion”: “However lightning-like it may seem, the *punctum* has, more or less potentially, a power of expansion...when, paradoxically, while remaining a ‘detail.’ It fills the whole picture.”¹⁰³

¹⁰⁰ Ibid., 27.

¹⁰¹ Ibid., 20.

¹⁰² Ibid., 26–7.

¹⁰³ Ibid., 45.

For these reasons, I began with a “punctum,” hoping it would animate the music and me and lead to an expansion, a carrying forward.

Claudio Arrau consistently stresses the tenor line (i.e. G3-A3 in mm.1-3) by strongly accenting the first of those notes in each measure.

Why “stresses”? I needed it (or need it now) to mean “stress” (emphasize, highlight,) but also something slightly opposing. It is not that “the line” is simply there and he emphasizes it. Certainly the *affordance* is in the score and in a general sense a performer can “bring it out” to varying degrees. But each of those realizations will differ in as many ways as they resemble each other. They are each *created* in a unique context, and will in fact help fashion its context. So Arrau both creates and stresses. Is this not a contradiction? I would argue that it is rather a paradox, a tension to a sense beyond itself, rather than a contradiction, which reveals nonsense. What I *mean* by this paradox feels clear—I am in fact using these two words, indeed their friction, to point to that sense. (This is one way we use words to say more than their patterns, forms (. . . .) can usually say.) What that sense is would take some explication, a further carrying forward, but one aspect it reveals now is the tension, right at the outset of my analysis, between score-based and performance-based language, an ontological uneasiness.

“Stress,” then, was partly a concession to the usual way of talking about music. So is “tenor line.” Once I’ve introduced the idea of “line,” that will partly guide my analysis. It will carry forward into my discussion of the Arrau’s “alto line,” and how it

is not really a line, or at least a different kind of line. And how Pogorelich's gesture to an extent erases the sense of line. And how Sokolov makes his line particularly *melodic*. Though my use of "tenor" was meant for registral purposes, did it perhaps still lead me think more of vocal qualities? Is that how I came to understand Sokolov as "melodic"? However it came about, it allowed for a fruitful consideration and refining of "line." In other words, it immediately became clear that in the face of the complexity of performance, this concept falls short. Hence my preliminary attempt to carry "line" forward, to begin to explicate the implicit intricacy of the feeling that resonates with that word when we describe an event with it.

This accent pushes one in the direction of hearing these as downbeats.

My initial focus on line led immediately to a consideration of its effect on meter. The interaction of line and meter then becomes a concern of the overall analysis, shaping how I will approach Pogorelich's and Sokolov's performances. "Pushes one in the direction of" means "not quite." Thus I was led to pay closer attention to Arrau and create new distinctions: "in between" and then a sub-distinction "neither" and "both." These represent only a first attempt at coming to terms with a rather complex phenomenon. Recognizing a distinction between temporal and phenomenal dislocation, however, seems like a productive beginning. Not every two events that are objectively simultaneous are perceived as such. Conversely, two events need not be objectively simultaneous to be perceived that way. What might a phenomenology of simultaneity in music look like?

Attending to experience means not only the experience of music but the experience of one's description or analysis of it. That analysis is a continuation of the experience, a carrying forward of its momentum. One way that experience can be carried forward is into a more theoretical discourse, as my abbreviated exercise in meta-analysis began to demonstrate. Because theory (both music theory and conceptualization generally) is always implicit in experiencing, it can be explicated. Theory can arise organically from experiencing, emerging naturally from its momentum, and being forged by experience, could do perpetually better justice to its complexity.

BIBLIOGRAPHY

- Anderson, John. *Cognitive Psychology and Its Implications*. San Francisco: W.H. Freeman, 1980.
- Barolsky, Daniel. "Embracing Imperfection In Benno Moiseiwitsch's Prelude to Chopin." *Music Performance Research* 2 (2008): 48–60.
- Barthes, Roland. *Camera Lucida: Reflections on Photography*. Translated by Richard Howard. New York: Hill and Wang, 1981.
- Becker, Robert, and Gary Selden. *The Body Electric: Electromagnetism And The Foundation Of Life*. New York: William Morrow, 1985.
- Black, Max. "Review of George Lakoff and Mark Johnson 'Metaphors We Live By.'" *The Journal of Aesthetics and Art Criticism* 40, no. 2 (1981): 208–10.
- Brower, Candace. "A Cognitive Theory of Musical Meaning." *Journal of Music Theory* 44, no. 2 (2000): 323–79.
- — —. "Paradoxes of Pitch Space." *Music Analysis* 27, no. 1 (2008): 51–106.
- — —. "Pathway, Blockage, and Containment in Density 21.5." *Theory and Practice* 22/23 (98 1997): 35–54.
- Brugman, Claudia. "The Story of Over." University of California, Berkeley, 1981.
- Butterfield, Matthew. "The Musical Object Revisited." *Music Analysis* 21, no. 3 (2002): 327 – 380.
- Carman, Taylor. "Between Empiricism and Intellectualism." In *Merleau-Ponty: Key Concepts*, edited by Rosalyn Diprose and Jack Reynolds, 44–56. Stocksfield, UK: Acumen, 2008.
- — —. *Merleau-Ponty*. London ; New York: Routledge, 2008.
- — —. "Sensation, Judgment, and the Phenomenal Field." In *The Cambridge Companion to Merleau-Ponty*, 50–73. Cambridge, UK ; New York: Cambridge University Press, 2005.
- Cerbone, David R. "Perception." In *Merleau-Ponty: Key Concepts*, edited by Rosalyn Diprose and Jack Reynolds, 121–31. Stocksfield [UK]: Acumen, 2008.

- Clarke, Eric F. "Empirical Methods in the Study of Performance." In *Empirical Musicology Aims, Methods, Prospects*, edited by Eric F. Clarke and Nicholas Cook, 77–102. Oxford; New York: Oxford University Press, 2004.
- — —. *Ways of Listening: An Ecological Approach to the Perception of Musical Meaning*. Oxford; New York: Oxford University Press, 2005.
- Clarke, Eric F., and Nicholas Cook. *Empirical Musicology: Aims, Methods, Prospects*. Oxford; New York: Oxford University Press, 2004.
- Clausner, Timothy C. "Image Schema Paradoxes: Implications for Cognitive Semantics." In *From Perception to Meaning: Image Schemas in Cognitive Linguistics*, edited by Beate Hampe and Joseph E. Grady, 93–110. Berlin ; New York: Mouton de Gruyter, 2005.
- Clausner, Timothy C., and William Croft. "Domains and Image Schemas." *Cognitive Linguistics* 10, no. 1 (1999): 1–31.
- Clifton, Thomas. *Music as Heard: A Study in Applied Phenomenology*. New Haven: Yale University Press, 1983.
- Cook, Nicholas. "Between Process and Product: Music And/as Performance." *Music Theory Online* 7, no. 2 (2001): 1–31.
- Cox, Arnie. "Embodying Music: Principles of the Mimetic Hypothesis." *Music Theory Online* 17, no. 2 (2011).
- — —. "The Mimetic Hypothesis and Embodied Musical Meaning." *Musicae Scientiae* 5, no. 2 (2001): 195–212.
- Dodson, Alan. "Expressive Timing in Expanded Phrases: An Empirical Study of Recordings of Rhree Chopin Preludes." *Music Performance Research* 4 (2011): 2–29.
- Dreyfus, Hubert L. "Intelligence Without Representation – Merleau-Ponty's Critique of Mental Representation: The Relevance of Phenomenology to Scientific Explanation." *Phenomenology and the Cognitive Sciences* 1, no. 4 (2002): 367–83.
- — —. "Merleau-Ponty and Recent Cognitive Science." In *The Cambridge Companion to Merleau-Ponty*, edited by Taylor Carman and Mark B. N. Hansen, 129–50. Cambridge, UK ; New York: Cambridge University Press, 2005.
- — —. "Response to McDowell." *Inquiry* 50, no. 4 (2007): 371–77.
- — —. "The Primacy of Phenomenology over Logical Analysis." *Philosophical Topics* 27, no. 2 (1999): 3–24.

- — —. “The Return of the Myth of the Mental.” *Inquiry* 50, no. 4 (2007): 352–65.
- — —. *What Computers Still Can't Do: A Critique of Artificial Reason*. Cambridge, Mass.: MIT Press, 1992.
- Eitan, Zohar, and Roni Y. Granot. “How Music Moves.” *Music Perception* 23, no. 3 (2006): 221–48.
- Feld, Steven. “‘Flow like a Waterfall’: The Metaphors of Kaluli Musical Theory.” *Yearbook for Traditional Music* 13 (1981): 22.
- Gendlin, Eugene. “Crossing and Dipping: Some Terms for Approaching the Interface between Natural Understanding and Logical Formulation.” *Minds and Machines* 5, no. 4 (1995): 547–60.
- — —. *Experiencing and the Creation of Meaning: A Philosophical and Psychological Approach to the Subjective*. Evanston, Ill.: Northwestern University Press, 1997.
- — —. “How Philosophy Cannot Appeal to Experience, and How It Can.” In *Language Beyond Postmodernism: Saying and Thinking in Gendlin's Philosophy*, edited by David Levin, 1st ed., 3–41. Evanston, Ill.: Northwestern University Press, 1997.
- — —. “Process Generates Structures: Structures Alone Don't Generate Process.” *The Folio* 23, no. 1 (2012): 3–13.
- — —. “Reply to Johnson.” In *Language Beyond Postmodernism: Saying and Thinking in Gendlin's Philosophy*, edited by David Levin, 168–75. Evanston, Ill.: Northwestern University Press, 1997.
- — —. “The New Phenomenology of Carrying Forward.” *Continental Philosophy Review* 37 (2004): 127–51.
- — —. “What First & Third Person Processes Really Are.” *Journal of Consciousness Studies* 16, no. 10–11 (2009): 332–62.
- Gentner, Dedre, and Donald R. Gentner. “Flowing Water or Teaming Crowds: Mental Models of Electricity.” In *Mental Models*, edited by Dedre Gentner and Albert Stevens, 99–129. Hillsdale, NJ: Lawrence Erlbaum, 1983.
- Gibbs, Jr., Raymond W. “Categorization and Metaphor Understanding.” *Psychological Review* 99, no. 3 (1992): 572–77.
- — —. “Evaluating Conceptual Metaphor Theory.” *Discourse Processes* 48, no. 8 (2011): 529–62. doi:10.1080/0163853X.2011.606103.

- — —. "The Psychological Status of Image Schemas." In *From Perception to Meaning: Image Schemas in Cognitive Linguistics*, edited by Beate Hampe and Joseph E. Grady, 113–36. 29. Berlin ; New York: Mouton de Gruyter, 2005.
- — —. "Why Many Concepts Are Metaphorical." *Cognition* 61 (1996): 309–19.
- Gibbs, Jr., Raymond W., D. A. Beitel, M. Harrington, and P. E. Sanders. "Taking a Stand on the Meanings of Stand: Bodily Experience as Motivation for Polysemy." *Journal of Semantics* 11, no. 4 (1994): 231–51.
- Gibbs, Jr., Raymond W., and H. L. Colston. "The Cognitive Psychological Reality of Image Schemas and Their Transformations." *Cognitive Linguistics* 6, no. 4 (1995): 347–78.
- Gibson, James J. *The Ecological Approach to Visual Perception*. Hillsdale (N.J.): Lawrence Erlbaum Associates, 1986.
- — —. *The Senses Considered as Perceptual Systems*. Boston: Houghton Mifflin, 1966.
- Glucksberg, Sam, Mary Brown, and Matthew McGlone. "Conceptual Metaphors Are Not Automatically Accessed During Idiom Comprehension." *Memory & Cognition* 21, no. 5 (1993): 711–19.
- — —. "Conceptual Metaphors Are Not Automatically Accessed During Idiom Comprehension." *Memory & Cognition* 21, no. 5 (1993): 711–19.
- Glucksberg, Sam, and Boaz Keysar. "Understanding Metaphorical Comparisons: Beyond Similarity." *Psychological Review* 97, no. 1 (1990): 3–18.
- Glucksberg, Sam, Boaz Keysar, and Matthew McGlone. "Metaphor Understanding and Accessing Conceptual Schema: Reply to Gibbs (1992)." *Psychological Review* 99, no. 3 (1992): 578–81.
- Glucksberg, Sam, and Matthew McGlone. "When Love Is Not a Journey: What Metaphors Mean." *Journal of Pragmatics* 31, no. 12 (1999): 1541–58.
- Grady, Joseph E. "Image Schemas and Perception: Refining a Definition." In *From Perception to Meaning: Image Schemas in Cognitive Linguistics*, edited by Beate Hampe and Joseph E. Grady, 35–56. Berlin ; New York: Mouton de Gruyter, 2005.
- Gritten, Anthony, and Elaine King, eds. *Music and Gesture*. Aldershot, England ; Burlington, VT: Ashgate, 2006.
- — —. *New Perspectives on Music and Gesture*. SEMPRES Studies in the Psychology of Music. Farnham ; Burlington, VT: Ashgate Pub., 2011.

- Haser, Verena. *Metaphor, Metonymy, and Experientialist Philosophy: Challenging Cognitive Semantics*. Berlin ; New York: Mouton de Gruyter, 2005.
- Hasty, Christopher. "If Music Is Ongoing Experience, What Might Music Theory Be? A Suggestion from the Drastic." *Zeitschrift Der Gesellschaft Für Musiktheorie* 7 (2010).
- — —. *Meter as Rhythm*. Oxford University Press New York, 1997.
- — —. "The Image of Thought and Ideas of Music." In *Sounding the Virtual: Gilles Deleuze and the Theory and Philosophy of Music*, edited by Brian Hulse and Nick Nesbitt, 1–22. Surrey, UK; Burlington, VT: Ashgate, 2010.
- Hatten, Robert S. "A Theory of Musical Gesture and Its Application to Beethoven and Schubert." In *Music and Gesture*, edited by Anthony Gritten and Elaine King, 1–23. Aldershot, England; Burlington, VT: Ashgate, 2006.
- — —. *Interpreting Musical Gestures, Topics, and Tropes: Mozart, Beethoven, Schubert*. Bloomington: Indiana University Press, 2004.
- Heft, Harry. "Affordances and the Body: An Intentional Analysis of Gibson's Ecological Approach to Visual Perception." *Journal for the Theory of Social Behavior* 19, no. 1 (1989): 1–30.
- Husserl, Edmund. *On the Phenomenology of the Consciousness of Internal Time (1893-1917)*. Translated by John Barnett Brough. The Netherlands: Kluwer Academic Publishers, 1980.
- Jackendoff, Ray, and David Aaron. "Review Article: More Than Cool Reason: A Field Guide to Poetic Metaphor, by George Lakoff and Mark Turner." *Language* 67, no. 2 (1991): 320–38.
- Johnson, Mark. "Conceptual Metaphor and Embodied Structures of Meaning: A Reply to Kennedy and Vervaeke." *Philosophical Psychology* 6, no. 4 (1993): 413–22.
- — —. "Embodied Meaning and Cognitive Science." In *Language Beyond Postmodernism: Saying and Thinking in Gendlin's Philosophy*, 148–75. Northwestern University Press, 1997.
- — —. "Knowing through the Body." *Philosophical Psychology* 4, no. 1 (1991): 3–18.
- — —. "Merleau-Ponty's Embodied Semantics — From Immanent Meaning, to Gesture, to Language." *Euramerica* 36, no. 1 (2006): 1–27.

- — —. *The Body in the Mind: The Bodily Basis of Meaning, Imagination, and Reason*. Chicago: University of Chicago Press, 1987.
- Johnson, Mark, and George Lakoff. "Why Cognitive Linguistics Requires Embodied Realism." *Cognitive Linguistics* 13, no. 3 (2002): 245–64.
- Johnson, Mark, and Steve Larson. "'Something in the Way She Moves': Metaphors of Musical Motion." *Metaphor and Symbol* 18, no. 2 (January 1, 2003): 63–84.
- Kelly, Sean. "Seeing Things in Merleau-Ponty." In *The Cambridge Companion to Merleau-Ponty*, edited by Taylor Carman and Mark B. N. Hansen, 74–110. Cambridge, UK ; New York: Cambridge University Press, 2005.
- — —. "The Puzzle of Temporal Experience." In *Cognition and the Brain: The Philosophy and Neuroscience Movement*, edited by Andrew Brook and Kathleen Akins, 208–40. Cambridge; New York: Cambridge University Press, 2005.
- Kemler, Deanna. "Music and Embodied Imagining: Metaphor and Metonymy in Western Art Music," 2001.
- Kennedy, John M., and John Vervaeke. "Metaphor and Knowledge Attained via the Body." *Philosophical Psychology* 6, no. 4 (1993): 407–12.
- Keysar, Boaz, and Bridget Bly. "Intuitions of the Transparency of Idioms: Can One Keep a Secret by Spilling the Beans?" *Journal of Memory and Language* 34, no. 1 (1995): 89–109.
- — —. "Swimming against the Current: Do Idioms Reflect Conceptual Structure?" *Journal of Pragmatics* 31, no. 12 (1999): 1559–78.
- Lakoff, George. "The Contemporary Theory of Metaphor." In *Metaphor and Thought*, edited by Andrew Ortony, 2nd ed. Cambridge, England; New York: Cambridge University Press, 1993.
- — —. "The Invariance Hypothesis: Is Abstract Reason Based on Image-Schemas." *Cognitive Linguistics* 1, no. 1 (1990): 39–74.
- — —. *Women, Fire, and Dangerous Things*. Chicago: University of Chicago Press, 1987.
- Lakoff, George, and Mark Johnson. *Metaphors We Live By*. 2nd ed. Chicago: University Of Chicago Press, 2003.
- — —. *Philosophy in the Flesh: The Embodied Mind and Its Challenge to Western Thought*. New York: Basic Books, 1999.
- Langer, Susanne K. *Feeling and Form: A Theory of Art Developed from Philosophy in a New Key*. Charles Scribner's Sons, 1953.

- Larson, Steve. *Musical Forces: Motion, Metaphor, and Meaning in Music*. Musical Meaning and Interpretation. Bloomington: Indiana University Press, 2012.
- Leezenberg, Michiel. *Contexts of Metaphor*. Amsterdam ; New York: Elsevier, 2001.
- Lewin, David. "Music Theory, Phenomenology, and Modes of Perception." In *Studies in Music with Text*, 53–108. New York: Oxford University Press, 2006.
- Lidov, David. "Emotive Gesture in Music and Its Contraries." In *Music And Gesture*, edited by Anthony Gritten and Elaine King. Ashgate Publishing, Ltd., 2006.
- Lindner, Susan. "A Lexico-Semantic Analysis of English Verb Particle Constructions with Out and Up." PhD diss., University of California, San Diego, 1981.
- Lochhead, Judith. "The Temporal Structure of Recent Music: A Phenomenological Investigation." PhD diss., State University of New York at Stonybrook, 1982.
- McGlone, Matthew S. "Conceptual Metaphors and Figurative Language Interpretation: Food for Thought?" *Journal of Memory and Language* 35 (1996): 544–65.
- — —. "Hyperbole, Homunculi, and Hindsight Bias: An Alternative Evaluation of Conceptual Metaphor Theory." *Discourse Processes* 48, no. 8 (2011): 563–74.
- — —. "What Is the Explanatory Value of a Conceptual Metaphor?" *Language & Communication* 27, no. 2 (April 2007): 109–26.
- Merleau-Ponty, Maurice. *Phenomenology of Perception*. Translated by Colin Smith. London ; New York: Routledge, 2002.
- — —. *The Structure of Behavior*. Translated by Alden L. Fisher. Boston: Beacon Press, 1963.
- — —. *The Visible and the Invisible*. Translated by Alphonso Lingis. Evanston, Ill.: Northwestern University Press, 1969.
- Murphy, Gregory L. "On Metaphoric Representation." *Cognition* 60, no. 2 (1996): 173–204.
- — —. "Reasons to Doubt the Present Evidence for Metaphoric Representation." *Cognition* 62, no. 1 (1997): 99–108.
- Naroditskaya, Inna. "Azerbaijani Mugham and Carpet: Cross-Domain Mapping." *Ethnomusicology Forum* 14, no. 1 (2005): 25–55.

- Nayak, Nandini P., and Raymond W. Gibbs Jr. "Conceptual Knowledge in the Interpretation of Idioms." *Journal of Experimental Psychology* 119, no. 3 (1990): 315–30.
- Ortony, Andrew. "Are Emotion Metaphors Conceptual or Lexical?" *Cognition & Emotion* 2, no. 2 (1988): 95–104.
- Overton, Willis F., and David Stuart Palermo. *The Nature and Ontogenesis of Meaning*. Hillsdale, NJ: L. Erlbaum Associates, 1994.
- Quinn, Naomi. "The Cultural Basis of Metaphor." In *Beyond Metaphor: The Theory of Tropes in Anthropology*, edited by James W. Fernández, 56–93. Stanford University Press, 1991.
- Rakova, Marina. "The Philosophy of Embodied Realism: A High Price to Pay?" *Cognitive Linguistics* 13, no. 3 (2002): 215–44.
- Reed, Edward S. *James J. Gibson and the Psychology of Perception*. New Haven and London: Yale University Press, 1988.
- Rings, Steven. "The Learned Self: Artifice in Brahms's Late Intermezzi." In *Expressive Intersections in Brahms: Essays in Analysis and Meaning*, edited by Heather Platt and Peter H. Smith, 19–52. Bloomington: Indiana University Press, 2011.
- Rink, John S. "The Line of Argument in Chopin's E Minor Prelude." *Early Music* 29, no. 3 (2001): 434–46.
- — —. *The Practice of Performance: Studies in Musical Interpretation*. Cambridge, UK; New York: Cambridge University Press, 2005.
- Rink, John S., Neta Spiro, and Nicolas Gold. "The Form of Performance: Analyzing Pattern Distribution in Select Recordings of Chopin's Mazurka Op. 24 No. 2." *Musicæ Scientiæ* 14, no. 2 (2010): 23–55.
- Ruhl, Charles. *On Monosemy: A Study in Linguistic Semantics*. Albany: SUNY Press, 1989.
- Sanders, John T. "Merleau-Ponty, Gibson, and the Materiality of Meaning." *Man and World* 26 (1993): 287–302.
- Saslaw, Janna K. "Far Out: Intentionality and Image Schema in the Reception of Early Works by Ornette Coleman." *Current Musicology*, no. 69 (2000): 97–117.
- — —. "Forces, Containers, and Paths: The Role of Body-Derived Image Schemas in the Conceptualization of Music." *Journal of Music Theory* 40, no. 2 (1996): 217–43.

- — —. “Life Forces: Conceptual Structures in Schenker’s Free Composition and Schoenberg’s The Musical Idea.” *Theory and Practice* 22–23 (January 1, 1997): 17–33.
- Scholnick, Ellin K., and Kelly Cookson. “A Developmental Analysis of Cognitive Semantics: What Is the Role of Metaphor in the Construction of Knowledge and Reasoning?” In *The Nature and Ontogenesis of Meaning*, edited by Willis F. Overton and David Stuart Palermo, 41–90. Hillsdale, NJ: L. Erlbaum Associates, 1994.
- Selye, Hans. *The Stress of Life*. New York: McGraw-Hill, 1956.
- Senn, Olivier, Lorenz Kilchenmann, and Marc-Antoine Camp. “Expressive Timing: Martha Argerich Plays Chopin’s Prelude Op.28/4 in E Minor.” *International Symposium on Performance Science*, 2009, 107–12.
- Shanon, Benny. *The Representational and The Presentational: An Essay on Cognition and the Study of Mind*. Hertfordshire, England: Harvester Wheatsheaf, 1993.
- Still, Arthur, and Alan Costall. *Against Cognitivism: Alternative Foundations for Cognitive Psychology*. New York: Harvester Wheatsheaf, 1991.
- Sudnow, David. *Ways of the Hand: The Organization of Improvised Conduct*. Cambridge, Mass.: Harvard University Press, 1978.
- Sweetser, Eve. “Semantic Structure and Semantic Change: A Cognitive Linguistic Study of Modality, Perception, Speech Acts, and Logical Relations.” University of California, Berkeley, 1984.
- Taylor, Charles. “Merleau-Ponty and the Epistemological Picture.” In *The Cambridge Companion to Merleau-Ponty*, edited by Taylor Carman and Mark B. N. Hansen, 26–49. Cambridge, UK; New York: Cambridge University Press, 2005.
- Toadvine, Ted. “Phenomenology and ‘Hyper-Reflection.’” In *Merleau-Ponty: Key Concepts*, edited by Rosalyn Diprose and Jack Reynolds, 17–29. Stocksfield, UK: Acumen, 2008.
- Vervaeke, John, and John M. Kennedy. “Conceptual Metaphor and Abstract Thought.” *Metaphor and Symbol* 19, no. 3 (2004): 213–31.
- — —. “Metaphors in Language and Thought: Falsification and Multiple Meanings.” *Metaphor and Symbolic Activity* 11, no. 4 (1996): 273–84.
- Wittgenstein, Ludwig. *Philosophical Investigations*. Translated by G. E. M. Anscombe. Oxford, UK; Malden, MA: Blackwell, 1997.
- Wrathall, Mark. “Motives, Reasons, and Causes.” In *The Cambridge Companion to Merleau-Ponty*, edited by Mark B. N. Hansen and Taylor Carman, 111–28.

Cambridge Companions to Philosophy. Cambridge, UK ; New York: Cambridge University Press, 2005.

Zbikowski, Lawrence. "Conceptual Models and Cross-Domain Mapping: New Perspectives on Theories of Music and Hierarchy." *Journal of Music Theory* 41, no. 2 (1997): 193–225.

— — —. *Conceptualizing Music: Cognitive Structure, Theory, and Analysis*. AMS Studies in Music. Oxford ; New York: Oxford University Press, 2002.

— — —. "Metaphor and Music." In *The Cambridge Handbook of Metaphor and Thought*, edited by Raymond W. Gibbs Jr., 502 – 524. Cambridge, UK; New York: Cambridge University Press, 2008.

— — —. "Metaphor and Music Theory: Reflections from Cognitive Science." *Music Theory Online* 4, no. 1 (1998): 1–1.

— — —. "Music Theory, Music History, and Quicksand." *Music Theory Spectrum* 33, no. 2 (2011): 226–28.

— — —. "Musicology, Cognitive Science, and Metaphor: Reflections on Michael Spitzer's Metaphor and Musical Thought." *Musica Humana* 1, no. 1 (2009): 81–104.

Discography

Arrau, Claudio. *Claudio Arrau in Concert, Vol. 1: Chopin 24 Preludes Op. 28, Schumann Symphonic Etudes Op. 13*. Recorded 1960. Appian 5631, 2001, compact disc.

Darré, Jeanne-Marie. *Chopin: Preludes Op. 28, Fantasy in F minor, Op. 49, Berceuse Op. 57*, Vanguard OVC-8092, 1995

Groh, Markus. *Johannes Brahms: The Late Piano Pieces Op. 116, Op. 117, Op. 118, Op. 119*. Avie 2136, 2008, compact disc.

Katchen, Julius. *Brahms: Works for Solo Piano*. Recorded 1962 London/Decca 430053-2, 1990, compact disc.

Pogorelich, Ivo. *Chopin: Preludes*. Deutsche Grammophon 429227, 1990, compact disc.

Richter, Sviatoslav. *Out of the Later Years, Vol. 1*. Recorded 1991. Live Classics 471, 1997, compact disc.

Sokolov, Grigory. *Chopin Preludes Op. 28*. Recorded 1990, Opus 111 30-290, 1999, compact disc.